NLM Technical Bulletin

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Welcoming in the Technical Bulletin on the Web

Along with the New Year, NLM welcomes in its new electronic *NLM Technical Bulletin*. We hope that you will continue to read the articles and give us your feedback on our new look and feel as we enter the era of Web-based electronic information.

The *Technical Bulletin* on the Web

The *Technical Bulletin* will now be published electronically in HTML (Hyper-Text Markup Language) format via the NLM Web site, http://www.nlm.nih.gov, beginning with the next issue, January-February 1998. The November-December 1997 issue is the last issue to be printed on paper and mailed to readers

The name of the publication will not be changing and the issue numbers will continue sequentially without interruption. However, articles will now be numbered rather than having page numbers and they will have an electronic indicator "e" before the article number. For example, the first article in each online issue will be e1 and the second article will be e2.

Finding the *Technical Bulletin* **on the Web**

From the NLM Web site, under the heading Our Publications; click on More Publications; click on *NLM Technical Bulletin*. You can then bookmark the URL for quick and easy future use. The specific URL address for the electronic *Technical Bulletin* is: http://www.nlm.nih.gov/pubs/techbull/tb.html. You will still be able to download older issues of the *Technical Bulletin* in PDF (portable format document) and PostScript format.

Advantages of the *Technical Bulletin* on the Web

- Readers will have new information in a more timely manner - no more waiting for a complete issue to be cumulated and printed to find out about a new feature or other newsworthy information. New articles and Technical Notes will be published electronically as they become available.
- There will be electronic links to related material. If an article or Technical Note refers to a fact sheet, an item in the index, or any other material available on the Web, a link will be available (words will be underlined and a different color) and all you have to do is click on the link and the relevant material will appear on your Web browser.
- No more issues lost in the mail or on your desk. We receive several claims each month for issues never delivered; now the issue will always be as near as your computer.

Getting Around in the Webbased *Technical Bulletin*

Because each article will be in HTML format rather than a PDF or PostScript file you will be able to print a selected article right from your browser rather than downloading the entire issue. Reminder: The *Technical Bulletin* is not copyrighted and is freely reproducible.

All articles and Technical Notes published within the two-month time frame of an issue will then be compiled into one bimonthly issue and assigned an issue number. Completed issues will be easily distinguished by a dark icon. An issue that is in progress will be marked by a grayed-out icon.

Please note that beginning in 1998, new issues will no longer be available in the PostScript or Acrobat® PDF formats. However, the May-June 1993 through November-December 1997 issues, originally printed on paper, will continue to be available as downloadable PostScript and PDF files.

Alternatives to the *Technical Bulletin* on the Web

For users who do not yet have Web access, the following alternative methods of disseminating information will be available:

1. The complete table of contents for each issue of the *Technical Bulletin* will be posted in the newsletters published by the Regional Medical Libraries (RMLs). The RMLs will also be selecting and adapting material from the *Technical Bulletin* that is relevant for their particular

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Technical Notes

PubMed Enhancements

Over the last few months, there have been many changes to the appearance of the formats for retrieved citations in PubMed. These changes were made in response to and in anticipation of the requests and needs of librarians and other experienced information specialists.

The document summary page (the brief format displayed when you first retrieve your citations) has been enhanced with the following features:

- All citations with a MEDLINE Unique Identifier (UI) display this number at the end of the record, where it is easily seen. The PubMed Identifier (PMID) is also shown.
- Citations for review articles or retracted publications show "Review" or "Retracted publication," right after the source information.
- Citations for non-English language articles display the language name after the source information.
- The source information (journal title abbreviation, date, volume, issue, pagination) is shown in a format which meets the ANSI (American National Standards Institute) standard for this data. Experienced ELHILL searchers will recognize it as the standard MEDLINE format they have seen for years.
- PREMEDLINE citations display the notice "[MEDLINE record in process]" on a

separate line following the source information. Please remember that these citations are in the process of being indexed and undergoing quality control review. Therefore, in process citations will have no MeSH headings and any corrections for typographical errors will be done when the record is loaded into MEDLINE; no changes will appear on a citation while it is in process.

Publisher-supplied data are indicated in the citation display with the note "[Record as supplied by the publisher]". This means that the publisher has supplied NLM with the data electronically, which expedites the citation's appearance in PREMEDLINE. However, indexing is still done from the full text, and is based on the complete article not just the title and abstract. The [Record as supplied by the publisher] note will remain permanently only on those citations that are out of scope for MEDLINE coverage from journals that are selectively indexed. For example, future geology articles from the journal Science, would be present in PubMed with the [Record as supplied by the publisher] notation.

[Editor's Note: For more information on PubMed searching, see the article on page 5 of this issue.]

New NLM Web Site for Cataloging Section

The Cataloging Section announces the arrival of the NLM Cataloging Section Web site:

http://www.nlm.nih.gov/tsd/cataloging/mainpage.html

This site became available in late November. You may link to it from the NLM Web site (http://www.nlm.nih.gov) by clicking on Services for Libraries (under Special Information Programs) and then click on Cataloging. This online tool offers users practical information about NLM cataloging policies and practices for monographs, serials, audiovisuals and electronic resources. The documentation of NLM classification practices is a key feature of this site.

The Cataloging Section hopes that this Web site will be a useful information source and would appreciate users' feedback on its content. Instructions for submitting questions and comments are included at the Web site.

SI Field in GENBANK -Clarification

The Technical Note on page 3 of the September-October 1997 Technical Bulletin announced a change in format to the Secondary Source Identifier (SI) Field in GenBank records from six characters to eight characters as of spring 1997. This should have stated that new records coming into the database as of spring 1997 will contain an eight character value in the SI field. Older records will retain their original six character value.

Continued from page 1

- audiences and publishing this information in their regional newsletters. You may call 800-338-7657 to reach your RML and asked to be placed on the mailing list for the newsletter for your region.
- 2. The online NEWS in ELHILL will have a notice of each updated issue.
- 3. The complete table of contents for each issue will be posted in ELHILL and available with a SINFO command.

If you do not have Web access contact your RML. NLM and the RMLs are developing plans to assist all NN/LM hospital library members to obtain Web access.

The End of an Era

This is the final printed issue of the National Library of Medicine's *Technical Bulletin*. After 28 years the editorial staff has put the printed version to bed for the last time. The library has seen much growth and many changes over the years.

The first issue of the *Technical Bulletin* stated that the publication was "Established for the following purposes:

- to communicate technical and management information among those with a need to know about MEDLARS and network developments, and
- 2) to enable MEDLARS and network staff to interact with NLM staff and each other on matters affecting their operations."

The overall purpose of the *Technical Bulletin* hasn't changed drastically, although the audience for this information has expanded tremendously since the earliest issues of this publication. And now the means of distributing this information is being updated to take advantage of the amazing changes in technology that have emerged in just the last few years. NLM will continue to keep its users informed of searching and system changes that will be happening in the future.

The Name Game

The name of the *Technical Bulletin* has been changed several times since it was first

published. As a monthly publication, in May 1969 it was titled *MEDLARS/Network Technical Bulletin*.

In April 1977 the Library Network/ MEDLARS Technical Bulletin and the TOXLINE Technical Bulletin merged to become the NLM Technical Bulletin.

Milestones During the Life of the Printed *Technical Bulletin*

- October 1971, MEDLINE had 22 users and 147,000 citations from 236 journals.
- September 1972, MEDLINE Reference Manual was made available.
- In April 1985, a contractor was hired to do the printing and mailing of the Technical Bulletin.
- The June 1985 issue appeared in a new 2-column format using a new typeface and incorporating other design changes.
- The September 1986 special commemorative issue celebrated 15 years of MEDLINE.
- In 1986 the Library introduced Grateful Med, a user friendly software package that allowed the user to search the MEDLARS system without knowing the ELHILL command language. An important feature of Grateful Med was Loansome Doc. Loansome Doc made it possible to order full text of journal articles.
 - July 1989, Gold Standard Searches began. Searchers could match wits against NLM staff on a search strategy formulation. The winner received a prize.
- The July-August 1990 issue began bimonthly frequency.
- The September-October 1991 issue was the first issue prepared on a Macintosh computer using desktop publishing software. This gave the publication a new look.
- The November-December 1991 issue contained the first compliment/complaint form to be continued in every issue until a redesign in May-June 1996.

- The May-June 1993 issue was the first issue available in electronic format, as well as paper. PostScript and PDF files were put on the NLM Web site for users to download.
- For the May-June 1996 issue the publication was re-designed to a 3-column format with new fonts and an up-to-date look.
- In April 1996, Internet Grateful Med (IGM) was born making it possible for users to now search via the World Wide Web.
- PubMed was introduced in 1997, offering free searching via the World Wide Web. IGM searching was also made free at this time.
- In 1997 the MEDLARS system had 170,000 User ID codes. In June, when searching was made free via Web-based access the number of codes dropped to 119,000, at the same time the number of searchers and searches increased.
- MEDLINE and all its Backfiles contain over 9 million citations from 3,854 indexed titles and they are searchable in one file using PubMed.

Cumulative Index

The *Technical Bulletin* cumulative index will also be available electronically on this Web site. The index covers 1979 to 1994. Future indexes will includes links to the cited HTML-formatted article if it was published in January-February 1997 or later.

Indexes for 1995-1997 are not yet available. However, an e-mail link will be available from the Index page so that you may send a message if you are trying to locate a subject and it cannot be found in 1979 to 1994. NLM staff will respond to these messages.

We would like to thank all of the editors of the *Technical Bulletin*, past and present, and all contributing authors who have made the *Technical Bulletin* a useful tool for MEDLARS searchers.

--prepared by Mary Herron MEDLARS Management Section

NCI's CancerNet Web site includes CANCERLIT® and PDQ® Information

The National Cancer Institute's (NCI) databases, CANCERLIT and PDQ are now on the Web. For more than 20 years, the National Cancer Institute's (NCI) CANCERLIT, a bibliographic database of cancer-related literature has been available on the ELHILL computer at the National Library of Medicine. For nearly 15 years, PDQ, NCI's comprehensive cancer databank that includes information on cancer treatment, screening, prevention, and supportive care, also has been available on the mainframe computer. Now much of this information is available free of charge on the NCI's CancerNet Web site at:

http://cancernet.nci.nih.gov

There is a link to this site from the NLM Web site. Under Information Sources, click on More Databases, then scroll down to Cancer Information and click on CancerNet.

In early November, CANCERLIT was added to NCI's Web site, and most of the PDQ information also is available there. Only the physician and organizational directory information is not included with the Web version of PDQ.

CANCERLIT

From the CancerNet site, you can link to the Web version of CANCERLIT by clicking on "Health Professionals" followed by "CANCERLIT". Or you can go directly to the CANCERLIT Web site at:

http://cnetdb.nci.nih.gov

All of the nearly 1.4 million records from the CANCERLIT file in ELHILL are available here. Click on Search Instructions for a basic guide on how to search, display and save your retrieval. Please note that the Search Instructions for both the standard and expanded search forms have a table of contents and a detailed alphabetical index.

Standard Search Form

The Standard Search Form which first comes into view is designed for quick and basic searches. This search form permits only Boolean "and" searching (terms are separated by a space). For Boolean "and", "or", and "and not" searching, use the expanded search form under More Search Options at the bottom of the screen. Another option, "NCI-prepared searches", allows you to choose from a list of prepared searches on more than 90 topics in CANCERLIT. These searches show the date they were created and none are more than six months old.

Expanded Search Form

Before using the Expanded Search Form, you should review the Search Instructions. This Expanded Search Form offers options for limiting your search by many data fields (including MeSH terms). MeSH Word (major) is used for searching those MeSH terms that are considered to be a main point of the article (comparable to the *MeSH heading in ELHILL). MeSH Word (minor) is used for all MeSH terms whether major or minor points of the article. Main Heading Subheading combinations must be typed in full and separated by a forward slash or space and surrounded by quote marks (e.g., "Breast neoplasms/drug therapy").

It should be noted that this version of CANCERLIT has **no** MeSH hierarchical EXPLODE capability. Therefore, broader MeSH terms will not retrieve the narrower terms in each hierarchical category. MeSH should be used as a supplement to your text word searches in this Web version of CANCERLIT. It is anticipated that some future CANCERLIT literature will not be

MeSH-indexed as is the case with pre-1980 CANCERLIT literature.

The NCI plans to enhance both the standard and expanded search forms in 1998 with additional Boolean search capabilities, including the use of parentheses for nesting, the ability to custom tag your search terms with modifying data elements, and the ability to search based on proximity of terms within the text. Comments or questions about CANCERLIT may be sent to: cancerlit@icic.nci.nih.gov.

PDQ

Most of the PDQ information in the current MEDLARS PDQ database is available on the NCI Web site: http://cancernet.nci.nih.gov. From there click on: "Patient', or "Health Professional", and then click on one of the choices under "PDQ and Related Information". Through this site, you can access full-text information summaries from PDQ describing the latest advances in adult and childhood cancer treatment, supportive care, screening and prevention.

Clinical Trials (Protocols)

In searching for clinical trials (protocols), most of the PDQ database menu search elements are available on the Web site, including diagnosis, phase, modality, sponsorship, trial type, drug, protocol ID, city, state and country. All open and active clinical trials are included in the Web site, but the closed trials found on the MEDLARS PDQ database are not included here. Also, the very large Directory files of physicians and organizations are only available on the MEDLARS PDQ database. For PDQ, you may send your e-mail comments and questions to the following address: comments@icic.nci.nih.gov.

--prepared by Jim Carter National Cancer Institute

Transitioning from ELHILL to PubMed

A previous article in the Technical Bulletin (July-August 1997 issue) highlighted the basics of PubMed searching. A listing of some of the PubMed search rules and syntax appears on page 9 in this article. This page may be photocopied or removed to keep for ready reference. PubMed's search rules can be easily used to construct expert search strategies similar to those that users are accustomed to creating using the ELHILL command language. PubMed's search rules are easy to master. Two of the biggest syntax hurdles will be to break the habit of using parentheses rather than square brackets to qualify search terms, e.g., [pt] not (pt), and to remember that Boolean connectors must be entered in uppercase, e.g., AND, OR, and NOT.

PubMed offers certain advantages such as the ability to search against all years of MEDLINE and PREMEDLINE in one fell swoop. And, "Overflow" errors that arise on ELHILL from conditions such as terms that generate a high number of postings or date ranging don't routinely happen on PubMed.

To illustrate how easy it is to convert ELHILL commands into PubMed commands, this article will transform a *Technical Bulletin* Gold Standard search strategy into a PubMed search strategy. The search "The client is a layperson who wants information on alternative treatments for breast cancer"

was taken from the January-February 1997 issue. Figure 1 is the ELHILL search strategy originally formulated for CANCERLIT which explains search statements 9-11.

The PubMed Boolean Search page was used to recreate the ELHILL search strategy, in Figure 1, into a PubMed search. The Boolean Search page is best suited for constructing complex (or lengthy) search strategies--the query box is larger and scrollable which allows you to view your search strategy in full. To get there, click on Advanced Search from PubMed's Homepage and then click on the Boolean Search link.

Before you continue reading, at this point if you are still not familiar with PubMed, it is recommended that you review the listing of PubMed's search rules and syntax on Page 9. Otherwise, the translation detailed below from ELHILL language to PubMed may not be as clear.

The query box on the Boolean Search page must contain the entire search strategy as a single search statement. The first step in converting the ELHILL search strategy into a single search statement for PubMed was to create the three search statements that would be OR'd together (i.e., 3 or 5 or 6). Each of those search statements converted into a PubMed search statement follows:

SS 3: breast neoplasms [majr] AND alternative medicine [majr]

SS 5: holistic health [majr] OR wit and humor [majr] OR psychotherapy [majr] AND breast neoplasms [majr]

SS 6: breast neoplasms/diet therapy [majr]

Note: PubMed automatically explodes MeSH terms, whereas on ELHILL you must specify whether or not a term is to be exploded (e.g., breast neoplasms [majr] is equivalent to exp *breast neoplasms). The ability to turn off an automatic explode will be available soon. So. keep in mind that the same syntax is used for terms that are explodable as well as for terms that do not have any indentions. For example, the MeSH terms, "Holistic Health" and "Wit and Humor" (neither have indentions) are entered as holistic health [majr] and wit and humor [majr] and the explodable MeSH term "Psychotherapy" is entered as psychotherapy [majr].

Boolean search statements are processed left to right. To change the order in which PubMed processes a search statement, enclose the individual concept in parentheses. The terms inside a set of parentheses are processed as a unit and then incorporated into the overall strategy. Below are two examples of how the above PubMed search statements can be OR'd together with or without parentheses:

Example #1:

breast neoplasms [majr] AND alternative medicine [majr] OR (holistic health [majr] OR wit and humor [majr] OR psychotherapy [majr] AND breast neoplasms [majr]) OR breast neoplasms/diet therapy [majr]

Example #2:

alternative medicine [majr] OR holistic health [majr] OR wit and humor [majr] OR psychotherapy [majr] AND breast neoplasms [majr] OR breast neoplasms/diet therapy [majr]

PubMed can handle large explosions for over 9 million citations in a blink of an eye. While you should apply logic in formulating

SS 1:	exp *breast neoplasms
SS 2:	exp *alternative medicine
SS 3:	1 and 2
SS 4:	*holistic health or *wit a#d humor or exp *psychotherapy
SS 5:	1 and 4
SS 6:	exp *breast neoplasms/dh
SS 7:	3 or 5 or 6
SS 8:	7 contains eng (la) and 7 contains human (mh)
SS 9:	8 and 96 (yr) or 8 and 95 (yr) or 8 and 94 (yr)
SS 10:	8 and 93 (yr) or 8 and 92 (yr) or 8 and 91 (yr)
SS 11:	9 or 10

Figure 1 - ELHILL Search Strategy

a search, all those lessons about segmenting your terms into separate search statements for computer and cost-efficiency are just not vital to the new PubMed technology. That said, however, PubMed's future plans include a feature where you will be able to view a picture of the strategy--similar to Internet Grateful Med's "Details of Search" button. Here we hope to provide clarifying messages such as terms that have no postings. In addition, the plans also call for this feature to include an edit function so that a search strategy can be easily revised and resubmitted; and intermediate postings shown.

The remaining portion of the search strategy is to apply the search limiters for language (i.e., english), study group (i.e., human), and a date range (i.e., articles published during 1991-1996). Whereas, on ELHILL to apply the desired limits in CANCERLIT took an additional four steps (i.e., ELHILL search statements 8-11), this can be easily

translated on PubMed into the syntax below and then added (ANDed) to the search strategy.

english [la] AND human [mh] AND 1991:1996 [dp]

Figure 2 contains the ELHILL Gold Standard search converted into a single PubMed search statement.

alternative medicine [majr] OR holistic health [majr] OR wit and humor [majr] OR psychotherapy [majr] AND breast neoplasms [majr] OR breast neoplasms/diet therapy [majr] AND english [la] AND human [mh] AND 1991:1996 [dp]

Figure 2 - ELHILL search converted to PubMed

To ensure that the ELHILL search strategy was correctly converted to PubMed, the search strategies were run in their respective systems to compare search results. The ELHILL search was run in MEDLINE, MED93, and MED90. In both ELHILL and PubMed, the results were the same -- 37 was the total postings.

If you have any questions or comments about the PubMed search strategy, please contact PubMed customer support by clicking on the "Help Desk" link.

Helpful Hint:

While constructing a complex (or lengthy) search strategy for PubMed, it is helpful to use your word processing software as a scratch pad. Use the word processing software to enter your search terms, the correct syntax (e.g., search field tags enclosed in square brackets, Boolean connectors in all uppercase), and spell check. It helps to use extra spaces or blank lines to separate your concepts for ease of proofreading and checking your logic. Once you are satisfied with the search strategy, "copy and paste" it into the PubMed query box. Be sure to remove all extra spaces, hard carriage returns or other special word processing codes. You can then go back to the search strategy in your word processing software to edit or reformulate the search strategy—quickly and easily. Repeating the "copy and paste" step into the PubMed query box will then let you execute the revised strategy with just a few clicks.

Test Your Skills

Now that you have stepped through the process of translating an ELHILL search strategy into PubMed, why not test your skills? Figure 3 is a rather complex and lengthy ELHILL search strategy for you to translate into PubMed. This example is based on a portion of an ELHILL search used to create the MEDLINE subfile of SPACELINE.

Helpful Hint:

Before you get started, please refer to the Helpful Hint box on page 6 that discusses using your word processing software in conjunction with PubMed for complex and lengthy search strategies.

Once you have completed your translation you can compare it to the PubMed strategy that was constructed by the MEDLARS Management Section as seen in Figures 4 and 5 on page 8.

When the ELHILL search was run against MEDLINE back through MED66 there were 20,997 postings. PubMed yielded 21,107 postings--a difference of 110 postings on the test day. The tested ELHILL search differed from the strategy in Figure 3 in only one way--the first two MeSH terms were exploded in order to compare the total postings to PubMed because the automatic explosion of MeSH in PubMed cannot be turned off yet. Even with that adjustment PubMed had higher postings, though. Why the difference you ask? Remember, PubMed is a single database that not only includes all of MEDLINE (1966 to present) but PREMEDLINE as well. In addition, there are citations, labeled as [Record as supplied by publisher], which are electronically-supplied to NLM by the publisher. These citations are first received by PubMed before being processed into PREMEDLINE and eventually MEDLINE. In addition, for those electronically supplied citations, from journals that are selectively indexed (e.g.

Science or Nature), the non-indexed citations remain in PubMed even though they never become MEDLINE citations. The additional 110 citations found by PubMed for this search were confirmed to be either PREMEDLINE or publisher supplied citations.

Conclusion

In both the Gold Standard search and the Test Your Skills search you can see how a complex and lengthy ELHILL strategy can be transitioned to PubMed with equivalent results. Learning any new system is a challenge. As we work together with your direct feedback on your needs as information providers, PubMed will keep evolving to make it easier and clearer as evidenced by the future plans for the "Details of Search button."

--prepared by Carolyn Tilley, Lou Knecht and Rhonda Allard MEDLARS Management Section

- SS 1: space flight or extraterrestrial environment or aerospace medicine or submarine medicine or cosmic radiation
- SS 2: (ad) ames and research and center
- SS 3: 2 and not iowa (ad) and not ia (ad) and not all agricult: (ad)
- SS 4: (ad) johnson and space and center or kennedy and space and center or goddard and space and center or marshall and space and center or stennis and space and center
- SS 5: (ad) national and aeronautics and space or nasa
- SS 6: 5 and not spain (ad) and not france (ad)
- SS 7: (tw) space and agency
- SS 8: (tw) canadian or european or all japan: or french or german
- SS 9: 7 and 8
- SS 10: (tw) centre and national and etudes and spatiales
- SS 11: (tw) deutsche and agentur and raumfahrtangelegenheiten
- SS 12: blomqvist cg or booth f or booth fw or buckey jc or cintron nm or convertino v or convertino va or czeisler ca or daunton ng or dillaman rm or dudley ga or fitts rh or fortney s or fortney sm or fox ge or ganong wf or genant hk or hargens ar or hockstein li or horrigan dj jr or ingber de or jee ws or jukes th
- SS 13: kanavarioti a or keil lc or koch kl or kretsinger rh or lacey jc jr or lackner rd or lambertsen cj or lanyi jk or leach cs or loeppky ja or malacinski gm or margulis l or mcfeters ga or meehan rt or moore-ede mc or morey er or morey-holton e or morey-holton er or musacchia xj
- SS 14: orgel le or pak cy or partridge nc or perachio aa or pierson dl or ponnamperuma c or reschke mf or ross md or rumbaugh dm or schneider vs or schor rh or tipton cm or tischler me or vandenburgh hh or vailas ac or waligora jm or west jb or whalen rt or wilt f or wilt fh or woese cr or wolgemuth dj
- SS 15: (jc) kxc or ppj or bp5 or 2rq or 9ja or bx7 or ok7 or ok8 or ux6
- SS 16: 1 or 3 or 4 or 6 or 9 or 10 or 11 or 12 or 13 or 14 or 15

Figure 3 -Test Your Skills. Convert this ELHILL Search Strategy into PubMed

space flight [mh] OR extraterrestrial environment [mh] OR aerospace medicine [mh] OR submarine medicine [mh] OR cosmic radiation [mh] OR

(ames [ad] AND research [ad] AND center [ad] NOT (iowa [ad] OR ia [ad] OR agricult* [ad])) OR

((johnson [ad] OR kennedy [ad] OR goddard [ad] OR marshall [ad] OR stennis [ad]) AND space [ad] AND center [ad]) OR

((national [ad] AND aeronautics [ad] AND space [ad] OR nasa [ad]) NOT (spain [ad] OR france [ad])) OR

(space [tw] AND agency [tw] AND (canadian [tw] OR european [tw] OR japan* [tw] OR french [tw] OR german [tw])) OR

(centre [tw] AND national [tw] AND etudes [tw] AND spatiales [tw]) OR

(deutsche [tw] AND agentur [tw] AND raumfahrtangelegenheiten [tw]) OR

blomqvist cg OR booth f OR booth fw OR buckey jc OR cintron nm OR convertino v OR convertino va OR czeisler ca OR daunton ng OR dillaman rm OR dudley ga OR fitts rh OR fortney s OR fortney sm OR fox ge OR ganong wf OR genant hk OR hargens ar OR hockstein li OR horrigan dj jr OR ingber de OR jee ws OR jukes th OR

kanavarioti a OR keil lc OR koch kl OR kretsinger rh OR lacey jc jr OR lackner rd OR lambertsen cj OR lanyi jk OR leach cs OR loeppky ja OR malacinski gm OR margulis l OR mcfeters ga OR meehan rt OR moore-ede mc OR morey er OR morey-holton e OR morey-holton er OR musacchia xj OR

orgel le OR pak cy OR partridge nc OR perachio aa OR pierson dl OR ponnamperuma c OR reschke mf OR ross md OR rumbaugh dm OR schneider vs OR schor rh OR tipton cm OR tischler me OR vandenburgh hh OR vailas ac OR waligora jm OR west jb OR whalen rt OR wilt f OR wilt fh OR woese cr OR wolgemuth dj OR

kosm biol aviakosm med [ta] OR probl kosm biol [ta] OR adv space biol med [ta] OR aviakosm ekolog med [ta] OR aerosp med [ta] OR aviat space environ med [ta] OR orig life [ta] OR orig life evol biosph [ta] OR space life sci [ta]

Figure 4 - Test Your Skills ELHILL Search Converted to PubMed as it Might Appear in a Word Processing Document

space flight [mh] OR extraterrestrial environment [mh] OR aerospace medicine [mh] OR submarine medicine [mh] OR cosmic radiation [mh] OR (ames [ad] AND research [ad] AND center [ad] NOT (iowa [ad] OR ia [ad] OR agricult* [ad])) OR ((johnson [ad] OR kennedy [ad] OR goddard [ad] OR marshall [ad] OR stennis [ad]) AND space [ad] AND center [ad]) OR ((national [ad] AND aeronautics [ad] AND space [ad] OR nasa [ad]) NOT (spain [ad] OR france [ad])) OR (space [tw] AND agency [tw] AND (canadian [tw] OR european [tw] OR japan* [tw] OR french [tw] OR german [tw])) OR (centre [tw] AND national [tw] AND etudes [tw] AND spatiales [tw]) OR (deutsche [tw] AND agentur [tw] AND raumfahrtangelegenheiten [tw]) OR blomqvist cg OR booth f OR booth fw OR buckey jc OR cintron nm OR convertino v OR convertino va OR czeisler ca OR daunton ng OR dillaman rm OR dudley ga OR fitts rh OR fortney s OR fortney sm OR fox ge OR ganong wf OR genant hk OR hargens ar OR hockstein li OR horrigan dj jr OR ingber de OR jee ws OR jukes th OR kanavarioti a OR keil lc OR koch kl OR kretsinger rh OR lacey jc jr OR lackner rd OR lambertsen cj OR lanyi jk OR leach cs OR loeppky ja OR malacinski gm OR margulis l OR mcfeters ga OR meehan rt OR moore-ede mc OR morey-holton e OR morey-holton er OR musacchia xj OR orgel le OR pak cy OR partridge nc OR perachio aa OR pierson dl OR ponnamperuma c OR reschke mf OR ross md OR rumbaugh dm OR schneider vs OR schor rh OR tipton cm OR tischler me OR vandenburgh hh OR vailas ac OR waligora jm OR west jb OR whalen rt OR wilt f OR wilt fh OR woese cr OR wolgemuth dj OR kosm biol aviakosm med [ta] OR probl kosm biol [ta] OR adv space biol med [ta] OR aviakosm ekolog med [ta] OR aerosp med [ta] OR aviat space environ med [ta] OR orig life [ta] OR orig life evol biosph [ta] OR space life sci [ta]

Figure 5 - Test Your Skills ELHILL Search Converted to PubMed as it Should Appear in the PubMed Query Box

Notes:

Author Searching: Currently, PubMed searches an author name having an initial or initials the same way ELHILL does. With the next system update, the search rules for author searching will change to incorporate automatic truncation that can be turned off. This will affect how this search would be translated to PubMed in the future.

Be advised that unqualified author names can retrieve from other fields such as the abstract where references may be cited.

Journal Titles: In Figure 3, the 3-character journal code (e.g., 2rq (jc)) was used to retrieve citations to specific journals on ELHILL. In PubMed, the 3-character journal code is not searchable. Instead, you can use

the MEDLINE title abbreviation (e.g., aerosp med [ta]) or the full title (e.g., aerospace medicine [ta]) to retrieve citations from specific journals.

PubMed Search Rules and Syntax

Boolean Syntax:

 Boolean operators, AND, OR, NOT must be entered in UPPERCASE. Please note that the ELHILL connector "and not" is simply the single word NOT on PubMed.

Because PubMed only recognizes Boolean operators in uppercase, it is no longer necessary to use a symbol to disguise MeSH terms that contain Boolean operators. For example, the MeSH term Wit and Humor must be entered in ELHILL as wit a#d humor using the hash mark to "hide" the word and. But in PubMed you simply enter wit and humor [mh].

- 2. PubMed processes all Boolean connectors in a left-to-right sequence. You can change the order in which PubMed processes a search statement by enclosing an individual concept in parentheses. The terms inside the set of parentheses will be processed as a unit and then incorporated into the overall strategy. On ELHILL, all AND statements are processed first.
- 3. When you enter a Boolean search statement, PubMed will automatically parse the search terms on either side of the Boolean operator into a single phrase. For example, cigarette smoking AND therapy will only search for cigarette smoking as a phrase, not cigarette AND smoking AND therapy.

In addition, if PubMed finds a phrase within a search strategy string that uses unqualified terms it will automatically search the terms as a phrase rather than simply combining them. For example, if you enter air bladder fistula in the PubMed query box, PubMed will search "air bladder" as a phrase. If you do not want this automatic phrase parsing enter each term separated by the Boolean operator AND, e.g., air AND bladder AND fistula.

Truncation:

 To truncate a term, use an asterisk (*) at the end of a search term. For example, bacter* will retrieve bacteria, bacterium, bacteriophage, etc. OR'd together automatically. Whereas on ELHILL, in addition to using the colon truncation symbol, you have to use the instruction word "all" to avoid getting an ELHILL Multi-Meaning message (e.g., all bacter.).

Note: There is no single-character truncation symbol such as the pound sign (#) used on ELHILL.

Date and Date Range Format:

1. Dates or date ranges must be entered using the format YYYY/MM/DD [dp], e.g. 1997/10/06 [dp] . The month and day are optional (e.g., 1997 [dp] or 1997/03 [dp]). To enter a date range, insert a colon (:) between each date (e.g., 1993:1995 [dp] or 1997/01:1997/06 [dp]).

Note: To specify a publication date or range, it is recommended that you search only by year (e.g., 1996 [dp] or 1995:1997 [dp]). Journals vary in the way the publication date appears. Some journals include just the year, whereas others include the year plus month or year plus month plus day. And, some journals use the year and season (e.g., Winter 1997). The publication date is recorded as it appears in the journal.

Search Field Qualification:

Terms can be qualified using PubMed's search field tags. Note: A list of search field tags is available in PubMed's online help under Search Fields.

- 1. Terms must be post-qualified, such as aromatherapy [mh] not [mh] aromatherapy.
- 2. Search field tags must be enclosed in brackets, e.g., [mh] not (mh).
- 3. Case does not matter nor does spacing, e.g., crabs [mh] = Crabs[mh].
- 4. Terms that are qualified with the Text Words field tag [tw] will be searched for in the Title, Abstract, MeSH headings and Subheadings, and Names of Substance. Whereas, on ELHILL Subheadings are not included in a Text Word search. Some additional fields will be added to PubMed's [tw] soon.

MeSH Terms, Subheadings, and Language

MeSH Terms:

- MeSH Terms must be qualified using the search field tags, e.g., [mh] for MeSH Terms or [majr] for Major MeSH Topic. The asterisk (*) which on ELHILL is used for MeSH Major Topic is reserved for truncation in PubMed.
- MeSH terms are automatically exploded to include the more specific terms. The ability to turn off this automatic explosion is coming soon to PubMed.

Note: Searching with MeSH terms will exclude PREMEDLINE citations as they have not yet been indexed with MeSH.

Subheadings:

- 1. You can directly attach subheadings using the format MeSH Term/subheading (spelled out), e.g., neoplasms/diet therapy [majr]. The ability to use the two-letter subheading abbreviations will be available soon. In addition, only one subheading may be directly attached to a MeSH term, e.g., neoplasms/diet therapy [majr] OR neoplasms/drug therapy [majr]
- The Subheading field and search field tag (e.g., [sh]) will be available soon in PubMed so that multiple Subheadings can be "free-floated" in a search strategy.

Language:

 Language must be spelled out. The 3character abbreviation search (e.g., eng) is coming soon to PubMed.

Note: The ELHILL expression "and not for (la)" was devised to aid in computer efficiency. Negating about 25% of MEDLINE citations (those that are foreign language) is much more efficient and less costly than limiting to 75% of MEDLINE (those that are English) on ELHILL. This shortcut is not necessary on PubMed. So, you can now use the syntax AND english [la] on PubMed without worrying about overloading the system.

Rev. 1/98

NLM Classification, 5th Edition

Additions and Changes List 2

The following additions and changes to the fifth edition of the *NLM Classification* have been made since the issuance of Additions and Changes, List 1, announced in the January-April 1996 issue of the *Technical Bulletin*. The Cataloging Section conducted a systematic review of the new 1996 and 1997 MeSH terms to determine the need for additions and changes to the classification. The resulting additions and changes are presented in chart form in the following categories: New Table G Numbers Added, Additions/Changes to the Main Schedules, Additions in the Index, and Notable Changes in the Index.

Questions may be referred to Christa Hoffmann at 301-496-7135.

--prepared by Wen-Min Kao Technical Services Division

New Table G Numbers Added

AS9	-	Southeastern United States		
AS95	-	Southwestern United States		
DC3	-	Caribbean Region		
DG4	-	Grenada		
FG9	-	Guernsey		
GM35	_	Mediterranean Region		

JQ2 - Qatar

Additions/Changes in the Main Schedules

Note: In the chart below, new numbers and their associated headings are italicized.

Page Reference

p. 39 at QW 525.5

- p. 48 at QY 21 Medical technology as a profession. Ethics. Peer review
- p. 48 at *QY 22 Directories of
 medical technology (Table G)
- p. 48 at *QY 22.1 Directories of
 medical technology (Not Table G)
- p. 60
- p. 60
- p. 67
- p. 69
- p. 96 at WD 200.5
- p. 110 at WF 141.5
- p. 117 at WG 166.5
- p. 161 at WM 420.5
- p. 174
- p. 208
- p. 229
- p. 230

Change/Addition

add .136 Immunophenotyping

change to: QY 21 Medical laboratory technology as a profession. Ethics. Peer review

change to: *QY 22 Directories of medical laboratory technology (Table G)

change to: *QY 22.1 Directories of medical laboratory technology (Not Table G)

add W 82 Medical technology (General)

add W 83 Telemedicine (General) (Table G)

add W 83.1 General coverage (Not Table G)

add WA 30.5 Environmental medicine. Environmental illness

add WA 330 Adolescent health services

add .17 Iron metabolism disorders

add .C2 Capnography

add .A3 Angioplasty

add .13 Imagery (Psychotherapy)

add WO 505 Endoscopic surgery

add WU 460 Dental care for the chronically ill

add WY 86.5 Holistic nursing

add WY 150.5 Rehabilitation nursing

Additions in the Index

Note: In the chart below, index entries for new numbers added are italicized

Accidents, Radiation In industry WA 470

Acupressure WB 537

Adolescent Health Services WA 330

Anatomy, Cross-Sectional QS 4 See also special organs or systems under Anatomy

Anesthetics, Combined QV 81 For general anesthesia

WG 166.5.A3 Angioplasty In the treatment of a particular disease, with the disease See also Endarterectomy WG 170

Anti-Allergic Agents QV 157

Anti-Asthmatic Agents QV 120

Antibiotic Prophylaxis General QV 350 In surgery WO 178-188 For prevention of specific disease, class with the disease; for use of specific antibiotic, class with the drug

Anti-HIV Agents QV 268.5

Anti-Obesity Agents QV 126 As appetite depressants QV 129

Antiparasitic Agents QV 250

Apoptosis QH 671

Appetite Stimulants OV 100 Used for a specific disorder, with the disorder

Aromatherapy WB 925 Used for special purposes, by subject

QU 110 Beta Carotene As a coloring agent WA 712 Vitamin A related QU 167

Bioreactors TP 248.25.B55 Special biological systems as bioreactors, with the system, e.g., Erythrocytes WH 150; Animal cells TP 248.27.A53

Bone Marrow Neoplasms WH 380

Breast Implants WP 910

Bronchoalveolar Lavage WF 600

Cancer Vaccines QZ 5 For particular neoplasms, with the neoplasm

Capillary Leak Syndrome WG 700

Capnography WF 141.5.C2

Used for general anesthesia monitoring WO 275

Case Management W 84.7 In nursing WY 100

Cell Culture QH 585.2-585.45 In histology QS 530 Techniques QS 525

Cell Respiration QH 633

Cells, Immobilized Cytology QH 585.5.145 Biotechnology TP 248.25.I55 Special topics, by subject

Chemoprevention General WB 330 QZ 267 Neoplasms

Chickenpox Vaccine WC 572

Chromosome Breakage QH 462.B7

Chronotherapy WB 340 For particular diseases, with the disease

Circumcision, Female Anthropology GN 484 Medical procedure WP 200

Citric Acid QU 98

Color Therapy WB 890 For particular diseases, with the disease

Community Networks In community health services WA 546 As information systems W 26.55.I4

Computational Biology QH 506

Computing Methodologies In medicine (General) W 26.5 In other special fields (Form number 26.5 in any

NLM schedule where applicable) Used for special purposes, by subject

Condoms WJ 710

Condoms, Female WP 640

Contraception Behavior General works HQ 766

WM 430.5.M3 Couples Therapy

Craniofacial Abnormalities WE 705

Crime Victims HV 6250-6250.4 Crisis intervention WM 401 Psychological aspects (General) WM 165

Critical Pathways W 84.7 In nursing WY 100

Cultural Diversity Embolization, Therapeutic Personnel management HF 5549.5.M5 General works WH 310 As social factor in public health WA 30 Performed in interventional radiology Special topics, by subject Used for the control of operative hemorrhage Decompression, Surgical WO 500 WO 500 Localized, by site Used for particular diseases, with the disease For special purposes, by subject See also Hemostasis, Surgical WO 500, etc.; Hemostatic Techniques WH 310 Defibrillators, Implantable WG 330 Empiricism Delivery of Health Care, Integrated W 84 Medical philosophy History (Ancient) WZ 51 WU 29 Dental Audit Of a hospital dental service WU 27 Enamel Microabrasion WU 220 Dental Care for Children WU 480 Endemic Diseases WA 105 Statistics and surveys WA 900 Dental Care for Chronically Ill WU 460 Specific diseases, with the disease Dental Implants, Single-Tooth WU 640 Endosonography WN 208 Used for special purposes, by subject Dental Prosthesis, Implant-Supported Endotoxemia WC 240 WU 500-530 Entropy Dental Research WU 20.5 Biochemistry OU 34 QC 318.E57 Dental Restoration Failure Physics Dental Prosthesis WU 500-530 Environmental Illness Dental Restoration WU 300-360 General WA 30.5 Due to specific etiology, by subject, e.g., Dentist's Practice Patterns WU 29 Food Hypersensitivity WD 310; Air Pollution, Indoor WA 754 Dentition, Permanent WU 210 Environmental Medicine WA 30.5 Depression, Postpartum WQ 500 Ethnobotany GN 476.73 Dietary Sucrose QU 83 In medicine As a sweetening agent WA 712 Plants, Medicinal QV 766-770 Medicine, Traditional WB 50 Disease Management W 84.7 History WZ 309 DNA Footprinting Evidence-Based Medicine WB 102 As a genetic technique QH 441 Evolution, Molecular DNA Methylation QU 58.5 In biogenesis QH 325 See also Evolution QH 359-425, etc.; Drug Resistance, Neoplasm Genetics QH 426-470, etc.; In drug therapy (General) QZ 267 Molecular Biology QH 506 In particular neoplasms, with the neoplasm Expressed Emotion BF 531-593 See also Antineoplastic Agents Specific emotions, with the emotion QV 269, etc. Towards patients with specific disorders, with the disorder Drugs, Essential General works QV 704 Facies Economic aspects QV 736 General physiology WE 705 Characteristic of a disease, Echocardiography, Four-Dimensional with the disease WG 141.5.E2 Fat Substitutes QU 86 Echocardiography, Three-Dimensional WG 141.5.E2 Feminism HQ 1101-1870.9 Educational Technology LB 1028.3 Financial Support Special topics, by subject For health planning WA 525-546 For research (Form number 20-20.5 in any Embolism, Paradoxical WG 540 NLM schedule where applicable) For training (Form number 18 in any NLM

schedule where applicable)

Support; Training Support

See also Health Planning Support; Research

Food Packaging Ilizarov Technique Chemical technology TP 374 Bone lengthening WE 168 Public health aspects WA 695-722 Fracture fixation WE 185 See also names of particular bones, joints, or Galanin WL 104 conditions Granulocyte Colony-Stimulating Factor Imagery (Psychotherapy) WM 420.5.13 WH 200 Immunity, Mucosal Grave Robbing WZ 320 General QW 563 Hair Follicle WR 450 Immunophenotyping QW 525.5.136 Health Care Surveys W 84.3 Infection Control, Dental WU 29 Health Food Information Management Nutritive value QU 145.5 General works Z 665+ Public health aspects WA 695-722 Special topics, by subject Health Personnel W 21 Insurance Coverage General HG 8011-9343 For the availability and distribution of health personnel see Health Health insurance W 100-275 Manpower W 76 See also names of specific types of insurance, See also names of specific types of e.g., Medicare WT 31 personnel, e.g., Allied Health Personnel W 21.5 Integrase QU 141 Health Transition Intellectual Property Epidemiology WA 105 Statistics WA 900 Copyright Z 551-656 Patents T 201-342 Special population groups WA 300-395 Intuition BF 315.5 Heat Stress Disorders WD 610 Iron, Dietary Heat Stroke WD 610 Biochemistry QU 130.5 See also Sunstroke WD 610 Pharmacology QV 183 Heat-Shock Response QT 120 Iron Metabolism Disorders WD 200.5.17 See also Heat-Shock Proteins OU 55 Iron Overload WD 200.5.17 Hematologic Neoplasms WH 525 Clinical pathology QZ 350 Ischemic Preconditioning QZ 170 Localized, by site Hemorrhagic Fever, Ebola WC 534 See also Ischemic Preconditioning, Myocardial WG 300 Hemostatic Techniques WH 310 Ischemic Preconditioning, Myocardial WG 300 See also Embolization, Therapeutic WH 310, etc. Jaw Fixation Techniques WU 610 Hepatitis Agents, GB QW 170 Keratectomy, Photorefractive, Excimer Laser WW 220 High-Energy Shock Waves Kinesiology, Applied WB 890 Therapeutic use WB 480 Used for particular disorders, with the disorder Used for special purposes, by subject See also Lithotripsy WJ 166, etc. Lactic Acid OU 98 HIV Enteropathy WC 503.5 Landau-Kleffner Syndrome WL 340.5

HIV Wasting Syndrome WC 503.5

Holistic Nursing
General WY 86.5

Hyperinsulinemia WK 880

Hypermedia Collection development Z 6
In medicine (General) W 26.55.S6 Library bookbinding Z 700
In other special fields (Form number 26.5 in any Preservation Z 700.9-701.5
NLM schedule where applicable)

Library Materials
Acquisition and selection Z 689-689.8
Cataloging Z 693-695.83
Classification Z 696-697
Medicine Z 697.M4
Collection development Z 687
Library bookbinding Z 700
Preservation Z 700.9-701.5

Leukostasis WH 200

Motor Neuron Disease WE 550 Liver, Artificial WI 770 Motor Vehicles TL 1-390 Living Donors QS 523-524 Accidents WA 275 Of specific organs, with the organ Air pollution WA 754 Human engineering in design TL 250 Managed Competition Noise hazard WA 776 W 74 Economic aspects See also specific type of vehicles, e.g., Related to managed care W 130 Ambulances WX 215, etc. Mandatory Reporting Multilingualism Of child abuse WA 320 Legislation WA 32-33 In language development WS 105.5.C8 Of elder abuse WT 30 Multimedia Legislation WT 32-33 (Form number 18.2 in any NLM schedule where applicable) Marfan Syndrome WD 375 Special topics, by subject Medical Errors Muscle Neoplasms WE 550 In the practice of medicine (General) WB 100 Muscle Weakness WE 550 In operative surgery WO 500 In particular areas, by subject Myocardial Ischemia WG 300 See also Diagnostic Errors WB 141; Medication Errors QZ 42, etc. Neck Pain WE 708 Medical Staff, Hospital WX 203 Neovascularization, Physiologic WG 500 See also Medical Staff W 84; Personnel, Hospital WX 159; Neuromuscular Blockade names of specific types of hospitals In surgery WO 234 Medicine, Unani WZ 80.5.A8 No-Observed-Adverse-Effect Level OV 602 Currently practiced WB 50 Of specific drugs, with the drug Herbal medicine WB 925 Nucleic Acid Synthesis Inhibitors QU 58 Meditation Behavior therapy WM 425.5.R3 Observation QT 265 Hygiene As a scientific method in research (Form number Physical therapy WB 545 20 or 20.5 in any NLM schedule where applicable) Transcendental meditation (Psychology) In specific topics, by subject BF 637.T68 Occlusal Adjustment WU 440 Megestrol WP 530 Used for special purposes, by subject Okadaic Acid As an enzyme inhibitor QU 143 Mental Competency Competency to consent in the acceptance Optic Neuropathy, Ischemic WW 280 of health care W 85 Legal aspects W 32-33 Oral Ulcer WU 140 Related to the mentally ill WM 32-33 Orphanages HV 959-1420.5 Metaphor In psychoanalysis WM 460.5.D8 Ossification of Posterior Longitudinal Ligament In psychotherapy WM 420 WE 725 In other specific subjects, with the subject Osteotomy, Le Fort WU 610 Micronutrients Ovulation Detection WP 540 Biochemistry QU 130.5 Analytical chemistry QD 139.T7 Paclitaxel Pharmacology QV 269 Mind-Body Relations (Metaphysics) Therapeutic use QZ 267 In alternative medicine WB 880 Pancreas, Artificial WI 830 Mineral Fibers Biochemistry QU 130 Pancreatitis, Alcoholic WI 805 As environmental air pollutants WA 754 Causing a specific disease, with the disease Pelvic Pain WP 155

Mosses QK 534-549.5

Peroxisomal Disorders WD 205.5.L5 Retinal Perforations WW 270 Persian Gulf Syndrome Retreatment Veterans' broad health care issues Of a particular disease, with the disease UB 368-369.5 Psychological aspects WM 170-184 Rhizotomy WL 368 Particular disorders, with the disorder RNA, Satellite QU 58.7 Phacoemulsification WW 260 Rural Health Services WA 390 Phantoms, Imaging WN 150 Safety Management Physician-Nurse Relations General WA 250-288 From the physician's perspective W 62 In hospitals WX 185 From the nurse's perspective WY 87 In occupational settings WA 485-491 Radiation WN 650 Point-of-Care Systems In specific types of facilities, class with type In hospitals (General) WX 162 of facility in the number for administration Special topics, by subject if number for safety or accident prevention is unavailable; in the general works number Portasystemic Shunt, Transjugular Intrahepatic if both are lacking WI 720 Salivary Ducts WI 230 Postoperative Hemorrhage WO 184 WM 460.5.E3 Self Psychology Pregnancy Rate HB 901-1108 See also Self Concept BF 697, etc. Privacy Sepsis WC 240 Applied psychology BF 637.P Sexuality Privacy Human HQ 12-449 Applied psychology BF 637.P74 In adolescence WS 462 Medical records confidentiality WX 173 In infancy & childhood WS 105.5.S4 Special topics, by subject Psychology BF 692 See also Civil Rights Shamanism Quality-Adjusted Life Years Alternative medicine WB 885 Demography HB 1322 History WZ 309 Special topics, by subject See also Quality of Life WA 30 Shoulder Impingement Syndrome WE 810 Racquet Sports QT 260.5.R2 Single-Payer System W 100-275 Radiovisiography, Dental WN 230 Skull Base WE 705 Skull Base Neoplasms WE 707 WY 150.5 Rehabilitation Nursing Of particular diseases, with Solar Activity QB 524-526 the nursing number for the disease Somatropin WK 515 Renal Agents Deficiency WK 550 Therapeutic use WJ 166 As a cause of a particular disorder, See also Anti-Infective Agents, Urinary QV 243; with the disorder Diuretics QV 160; Uricosuric Agents QV 98 Soy Proteins QU 55 As a supplement in health or disease WB 430 Reproduction Techniques WQ 208 Cookery for protein control WB 430 Reproductive History WQ 205 Space Suits TL 1550 In space medicine WD 750-758 Rescue Work First aid WA 292 Spectroscopy, Near-Infrared Medical emergencies WB 105 General qualitative and quantitative For specific conditions, by subject analysis QD 96.I5 Organic analysis QD 272.S6 Resin Cements WU 190 Food analysis TX 547.2.I53 Used for special purposes, by subject Respiratory System Agents QV 120 See also specific kinds of agents, e.g., Stethoscopes WB 26 Antitussive Agents QV 76, etc. See also Auscultation WB 278

Stomatognathic Diseases WU 140

Stomatognathic System Anatomy WU 101 Abnormalities WU 101.5 Pathology WU 140 Physiology WU 102

Surgery WU 600

Streptococcus oralis QW 142.5.C6

Subacute Care WX 162-162.5 Nursing WY 152 WY 159 Pediatric Of a particular disease, with the disease

WM 29 Substance Abuse Treatment Centers

Suburban Health WA 300

W 84-84.8 Suburban Health Services See also Community Health Services WA 546

Suicide, Attempted HV 6543-6548 Psychiatric aspects WM 165 Specific disorders associated with attempted suicide, with the disorder See also Crisis Intervention WM 401

Superantigens OW 573

Surgery, Endoscopic General works WO 505 For specific diseases or regions, with the disease or region

Surgery, Minimally Invasive General works WO 505 For specific diseases or regions, with the disease or region

Tax Exemption HJ 2336-2337 Hospitals WX 157 In other fields, in practice management or economics number by subject

Technology, Medical Laboratory As a profession QY 21 Clinical pathology QY Diagnostic and therapeutic techniques QY 25 See also Diagnosis, Laboratory QY, etc.

Telemedicine General works W 83 In private practice WB 50 In particular subjects, by subject

Telepathology QY 25

Teleradiology WN 160

Temporomandibular Joint Disk WU 101-102

Terminally Ill In infancy and childhood WS 200 Medical aspects WB 310 Nursing WY 152 With a particular disease, with the disease Therapeutic Touch WB 890

Tobacco Industry HD 9130-9149

Tooth Attrition WU 140

Tooth Preparation WU 300

Tooth Preparation, Prosthodontic WU 500

Topography, Medical WB 700-710 Of specific diseases, with the disease See also Epidemiology WA 900, etc.

QV 602 Toxicity Tests For specific drugs, with the drug

Transplantation Conditioning WO 680 Used for special purposes, by subject, e.g., Bone Marrow Transplantation WH 380

Trauma Centers WX 215

Ultrasonography, Mammary WP 815

Universal Coverage W 100-275 See also names of specific types ofinsurance, e.g., Medicare WT 31

Urban Health Services WA 380

Vaccines, DNA QW 805

Vaginal Discharge WP 255

Vascular Capacitance WG 106

Vascular Neoplasms General works WG 500 In arteries WG 510 In veins WG 600 In coronary vessels WG 300

QU 55 Vegetable Proteins As a supplement in health or disease WB 430 Cookery WB 430

Veterinary Drugs SF 917 See also Veterinary SF 915 under Pharmacology

Vocabulary, Controlled Z 695-695.1 Medicine Z 695.1.M48

Wasting Syndrome WB 146 Associated with nutrition disorders WD 100 In infancy & childhood WS 115 In connection with specific diseases, with the disease See also HIV Wasting Syndrome WC 503.5

Women's Health Services General WA 309

Zebrafish QL 638.C94

Notable Changes in the Index

Note: Minor changes such as adding subindexes under specific existing $\hbox{Index terms are not listed in this chart.}$

Page Reference	Change	
p. I-81 under Embryo Transfer at sub-index Human	change classification no. from: WQ 205 to: WQ 208	
p. I-86 at Epithalamus see Diencephalon	change entire line to: Epithalamus WL 312	
p. I-93 at Fertilization in Vitro	change classification no. from: WQ 205 to: WQ 208	
p. I-100 under Gamete Intrafallopian Transfer at sub-index Human	change classification no. from: WQ 205 to: WQ 208	
p. I-106 at GTP-Binding proteins see G-Proteins	change entire line to: GTP-Binding Proteins QU 55	
p. I-129 at Insurance, Disability see Medicare	change to: Insurance, Disability HD 7105.2-7105.25 Medicare WT 31	
p. I-187 at Photons see Radiation	change to: Photons Physics QC 793.5.P42- 793.5.P429 Radiation effects of WN 600-630 Special topics, by subject	
p. I-233 under Surgery, Laparoscopic at sub-index General works	change classification no. from: WO 500 to: WO 505	
p. I-236 at Technology, Medical	replace the entire Index entry with: Technology, Medical General works W 82 Diagnostic and therapeutic techniques WB 365 Economic aspects W 74 Instrumentation (General) W 26 In special fields (Form number 26 in any NLM schedule where applicable) Special topics, by subject	

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NLM Internet Directory

The following Internet addresses may be used for specific questions and comments to NLM:

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Anonymous ftp Service Assistance	ftpadmin@nlm.nih.gov
Fixed-Fee and Flat-Rate Special Agreements	hajarian@nlm.nih.gov
GenBank Molecular Sequence Database Information	info@ncbi.nlm.nih.gov
Grateful Med	gmhelp@nlm.nih.gov
History of Medicine Division	hmdref@nlm.nih.gov
Images from the History of Medicine	hmdref@nlm.nih.gov
Interlibrary Loan (ILL)/DOCLINE Assistance	ill@nlm.nih.gov
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National Center for Biotechnology Information (NCBI) National Information Center on Health Services Research of Health Care Technology (HealthSTAR/HSTAT): Office of Public Information	info@ncbi.nlm.nih.gov und nichsr@nlm.nih.gov publicinfo@nlm.nih.gov siegel@nlm.nih.gov pres@nlm.nih.gov info@ncbi.nlm.nih.gov
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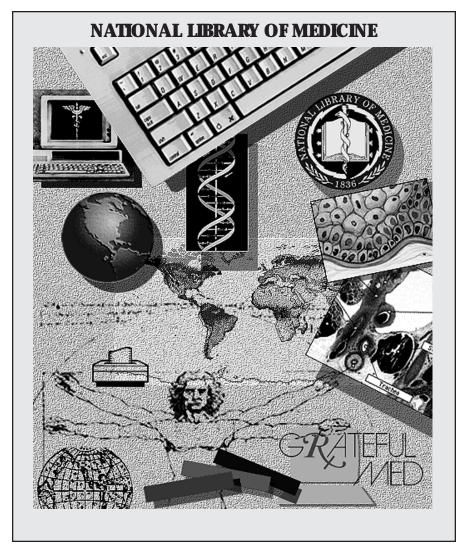
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