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DOCLINE® 2.8 Released

E-mail Alerts for Articles from your Favorite Journals

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Displaying PubMed® Results in AbstractPlus Display Format
[Editor's Note Added August 03, 2006]

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AHRQ Evidence Reports Added to NCBI Bookshelf

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NLM Gateway Adds Profiles in Science®

Updated PubMed Training Manual Available

NLM RSS Feeds and Podcasts

Number of Authors per MEDLINE®/PubMed® Citation
DOCLINE® 2.8 Released

July 14, 2006 [posted]

The latest version of DOCLINE, released on June 27, 2006, introduces new functionality for libraries providing Loansome Doc® service. The highlights of the enhancements in DOCLINE 2.8 include:

- Loansome Doc ordering - improved duplicate order warning message to prevent unnecessary requests
- Loansome Doc ordering - added navigation to PubMed® from the order page
- Loansome Doc registration - added default filter to limit list of libraries to those serving the general public
- Loansome Doc registration - option to prompt users for an authorization code to ensure patron permitted to register with selected library

Please see the DOCLINE 2.8 Release Notes for more details about the new features and to view selected screen shots.

E-mail Alerts for Articles from your Favorite Journals

July 14, 2006 [posted]

A Quick Tour demonstrating how to use My NCBI to set up e-mail alerts for articles from your favorite journals is now available from the PubMed Online Training PubMed Online Training page (click on the Tutorials link on the PubMed sidebar) and the Distance Education Program Resources page.
Papers of Virginia Apgar Added to Profiles in Science®

July 18, 2006 [posted]

The National Library of Medicine Profiles in Science Web site has been enriched by the addition of the papers of Virginia Apgar, M.D., creator of the widely used Apgar Score to evaluate newborns. The Library has collaborated with the Mount Holyoke College Archives and Special Collections to digitize her papers and make them widely available. This brings to 18 the number of notable scientists who have personal and professional records included in Profiles in Science.

In 1949, faced with unacceptably high newborn mortality rates in her hospital's maternity ward, Virginia Apgar (1909-1974), an anesthesiologist, set out to ensure that newborns in distress got the prompt attention they needed. Using the same signs anesthesiologists monitored during and after surgery—heart rate, respiration, reflex irritability, muscle tone, and color—she developed a simple, rapid method for assessing the medical condition of newborn babies. Quickly adopted by obstetric teams, her method (now known as the Apgar Score) reduced infant mortality and laid the foundations of neonatology.

"Dr. Apgar brought enormous intelligence and energy to everything she did. Her newborn scoring method put neonatology on a firm scientific basis, and she made substantial contributions to anesthesiology and the study of birth defects. I personally found her a memorable and inspiring teacher," said Donald A. B. Lindberg, M.D., Director of the National Library of Medicine.

The online exhibit features correspondence, published articles, photographs, lectures, and speeches from Apgar's files. An introductory exhibit section places Apgar's achievements in historical context.

Displaying PubMed® Results in AbstractPlus Display Format

July 19, 2006 [posted]  
August 03, 2006 [editor's note added]

On July 19, 2006 the PubMed default display for single citations changed from Abstract to AbstractPlus. For PubMed searches that retrieve multiple results and display in the Summary format, click the author name(s) link or the icon to the left of each citation to display the AbstractPlus format for that citation. Search results for a single citation will also display in the AbstractPlus format.

AbstractPlus is an enhanced Abstract view that shows the first five Related Articles for each PubMed citation.


DailyMed® Logs 500th Label

DailyMed, the Web site created in November 2005 by the National Library of Medicine® (NLM) in cooperation with the Food and Drug Administration, has added its 500th drug label.

The site is the official distribution mechanism for the latest electronic drug label information approved by the FDA. The information is not only published on the Web, but may be downloaded. The address for DailyMed is http://dailymed.nlm.nih.gov/dailymed/about.cfm.

DailyMed provides a standard, up-to-date source for look-up and download of drug information found in medication package inserts for use by clinicians, patients, and health information providers. Users may choose to be notified electronically when new or updated label information is released. The goal is for DailyMed to contain standard label information for all FDA-approved medications. One benefit will be to aid the development of personal electronic health records.

The information in DailyMed is linked to other key information sources, including ClinicalTrials.gov, MedlinePlus.gov, and PubMed® /MEDLINE® so users may retrieve the latest research results on a specific drug of interest.

DailyMed was created by NLM's Medical Subject Headings Section, working with staff of the Library's Office of Computer and Communications Systems.

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**MEDLINE® Milestone - 14 Millionth Journal Citation**

**August 22, 2006** [posted]

On August 5, 2006 MEDLINE attained a major milestone when the 14 millionth journal citation was added to the database.

PubMed, which reached 16 million citations in December 2005 (including the 1.7 million OLDMEDLINE citations), is searched at a rate of more than 76 million searches per month. It is updated with in-process and MeSH-indexed citations 5 times per week. More than 82% of data entry now comes from electronic submissions. NLM reached the all time annual high of adding about 606,000 indexed citations from 4,928 journals at the close of Fiscal Year 2005. MEDLINE is leased by more than 400 organizations (the majority of which are mining the data for research purposes).

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**AHRQ Evidence Reports Added to NCBI Bookshelf**

**August 22, 2006** [posted]

The National Center for Biotechnology Information (NCBI) has recently added two new AHRQ (Agency for...
Healthcare Research and Quality) Evidence Reports to the HSTAT collection on the Bookshelf. HSTAT, Health Services/ Technology Assessment Text, is a free, Web-based resource of full-text documents that provide health information and support health care decision making.

121. Use of Spirometry for Case Finding, Diagnosis, and Management of Chronic Obstructive Pulmonary Disease (COPD)

122. Knowledge and Access to Information on Recruitment of Underrepresented Populations to Cancer Clinical Trials

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**New Treatment Improvement Protocol (TIP) Added to HSTAT**

**August 22, 2006** [posted]

The National Center for Biotechnology Information (NCBI) has recently added a new SAMHSA/CSAT Treatment Improvement Protocol to the HSTAT collection on the Bookshelf. HSTAT, Health Services/ Technology Assessment Text, is a free, Web-based resource of full-text documents that provide health information and support health care decision making.

Treatment Improvement Protocols (TIPs) are best practice guidelines for the treatment of substance abuse. The Center for Substance Abuse Treatment's (CSAT) Office of Evaluation, Scientific Analysis, and Synthesis draws on the experience and knowledge of clinical, research, and administrative experts to produce the TIPs, which are distributed to a growing number of facilities and individuals across the country. The audience for the TIPs is expanding beyond public and private substance abuse treatment facilities as alcohol and other drug disorders are increasingly recognized as a major problem.

45. Detoxification and Substance Abuse Treatment

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**NLM Gateway Adds *Profiles in Science*®**

**August 22, 2006** [posted]

On August 22, 2006, NLM released a new version of the Gateway that provides simultaneous searching and access to the data in the *Profiles in Science* collection in addition to the 22 collections that the NLM Gateway currently searches. For more information on this new version see What's New on the Gateway's features bar.

If you have questions or comments, please contact us at gateway@nlm.nih.gov.

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**Updated PubMed Training Manual Available**

August 22, 2006 [posted]

An August 2006 edition of the PubMed® training workbook is now available for download from the NLM Web site. The current edition of the PubMed workbook reflects changes since May 2006 including the new AbstractPlus display format. The manual is available for downloading in Portable Document Format (PDF) and Microsoft® (MS) Word formats. Feel free to use any part of the workbook - you may customize parts for training programs, demonstrations, or workshops you conduct. The workbook is not copyrighted.

Training materials used in training on NLM Gateway and ClinicalTrials.gov; Toxicology and Environmental Health Web Resources; the Unified Medical Language System® (UMLS®); and Molecular Biology Information Resources are also available from the NLM Training Manuals and Resources site. These materials correspond to the NLM's National Training Center and Clearinghouse training courses described at: http://nnlm.gov/mar/online/description.html.

NLM RSS Feeds and Podcasts

August 25, 2006 [posted]

A list of NLM RSS Feeds and Podcasts is now available at: http://www.nlm.nih.gov/listserv/rss_podcasts.html

Number of Authors per MEDLINE®/PubMed® Citation

August 30, 2006 [posted]

The National Library of Medicine® has updated and redesigned its electronic resource illustrating the number of personal authors and/or collective (group or corporate) author names per MEDLINE®/PubMed® citation. This information is available at: http://www.nlm.nih.gov/bsd/authors1.html
Change the Display Format of Single Citations with My NCBI PubMed® User Preferences

[Editor's Note: This feature was implemented in PubMed on July 26, 2006.]

When you run a PubMed search, multiple results display in the Summary format. From there, the link on the author name(s) or the icon to the left of each citation takes you to the AbstractPlus format for that single citation. A new feature coming to My NCBI allows you to set these links to go to a different format.

The single citation display can be changed using My NCBI or by adding a URL parameter to the PubMed URL. The change also affects the display format when the retrieval is just one citation.

Activate in My NCBI
Register/Sign in to My NCBI and click on User Preferences on the My NCBI sidebar. The PubMed single citation display default is "Abstract." Choose an alternate display from the pull-down menu and click OK to activate this feature. The alternate display will only be active when you are signed into My NCBI.

[Editor's Note: A Quick Tour, Customizing PubMed's Display of Single Citations, demonstrating this feature is available from the PubMed Online Training page.]
Activate by URL Parameter
You can also change the single citation display by adding a URL parameter to the PubMed URL. The pertinent URL parameter is `dr=` followed by the display name.

For example, to change the default to the Citation display use:


The display will revert to the default format (Abstract) after 8 hours of inactivity when using the URL parameter.

By Kathi Canese
National Center for Biotechnology Information

**MLA 2006: Meeting Remarks**

NLM Online Users' Meeting
- Meeting Remarks - David Gillikin, Head, MEDLARS Management Section
- PowerPoint® Presentations for Meeting Remarks, MedlinePlus®, DOCLINE® and MeSH®
- Questions and Answers
- NLM Theater PowerPoint® Presentations
- NLM Update PowerPoint® Presentations

[Editor's note: These are remarks made by David Gillikin, Head, MEDLARS Management Section, National Library of Medicine at the Annual Meeting of the Medical Library Association in Phoenix, AZ on May 22, 2006. The accompanying PowerPoint® presentation is available.]

Good Morning. I'm David Gillikin and it is my pleasure to welcome you to the NLM Online Users' Meeting. I will be talking about changes and new features to various NLM products and services such as MEDLINE®, PubMed®, PubMed Central®, NLM Catalog, and the NLM Gateway, as well as other areas such as indexing. We will begin with Dr. Stuart Nelson, Head of the Medical Subject Headings (MeSH®) Section, who will talk about the Subheading Reduction proposal [Editor's Note: See decision]. Joyce Backus, Head of Reference and Web Services, will talk about MedlinePlus®, and Maria Collins from the Collection Access Section will speak about DOCLINE®. I will follow with the NLM Online update. We'll take your questions after all of the presentations are finished.

**NLM Online Update 2006**
**Milestones**

In 2006, NLM is celebrating a series of milestones:

- 170 years  The Library of the Surgeon General established, 1836
- 50 years  National Library of Medicine Act, Public Law 84-941, 1956
- 40 years  Specialized Information Services Division (SIS), NLM, 1966
- 35 years  MEDLINE, 1971
- 21 years  DOCLINE, 1985
- 10 years  PubMed, 1996 (available for free in 1997)

In addition to these historic milestones, there have been several other significant changes at NLM involving personnel. The following individuals have or are about to retire. In March, Eve-Marie Lacroix, Chief of the Public Services Division retired after 21 years of service. Of her many accomplishments, MedlinePlus stands out as a major achievement in providing extensive health care information to the public. After 15 years, Marj Cahn, Head of National Information Center on Health Services Research and Health Care Technology (NICHSR) retired in April. She had been the driving force behind NICHSR and the services and information provided by it. And in June, Carolyn Tilley will retire after an amazing 41 years of service. Currently serving as the Library Operations UMLS Coordinator, Ms. Tilley led the MEDLARS Management Section (MMS) for many years. Her dedication, especially to customer service for MEDLINE, had been a significant part of MMS and NLM for many years.

**Indexing**

The Index Section continues to set its own milestones. FY2005 saw over 606,000 citations indexed, the highest ever indexing rate achieved. So far in FY2006, over 301,000 citations have been indexed in the first 6 months, a rate even greater than last year. The creation of gene indexing links also grew in FY2005 with over 45,000 links created, compared to 33,444 created in the previous year. And in FY2005, over 80% of the MEDLINE citations are supplied electronically by publishers.

Additional events for Index Section included:

- ClinicalTrials.gov numbers and Gene Expression Omnibus (GEO) numbers were added to MEDLINE
- New Web-based training program for MEDLINE indexing was introduced in the fall
Electronic Journal Indexing advanced with:
  - 107 online-only journals indexed for MEDLINE, an increase from 90 one year ago
  - 140 additional journals, the online version is indexed instead of the print version, an increase from 95 one year ago
  - Dual monitors, and revised workflow/journal distribution methods allow for this change in journal format

NASA ended the Interagency Agreement with NLM for Space Life Sciences data; NLM is reviewing a list of NASA recommended journals to consider for indexing

**NLM Gateway**
The NLM Gateway added access to seven new collections this year:

- NCBI Bookshelf
- Household Products Database
- Developmental and Reproductive Toxicology Database (DART)
- Chemical Carcinogenesis Research Information System (CCRIS)
- Genetic Toxicology Data Bank (GENE-TOX)
- Integrated Risk Information System (IRIS)
- International Toxicity Estimates for Risk (ITER)

**OLDMEDLINE**
The focus of OLDMEDLINE work has been on mapping OLDMEDLINE keywords to current MeSH. With this project, 70% of the OLDMEDLINE citations have been mapped completely (over 1.2 million citations), while 22% of the citations are in process, with one or more keywords having been mapped. That leaves 8% of the OLDMEDLINE citations that have yet to have any keywords mapped to current MeSH. No new OLDMEDLINE citations are currently being added to the system due to budgetary constraints.

**PubMed**
The number of citations in PubMed has surpassed 16.4 million records. The number of MEDLINE records is over 13.8 million and expected to pass 14 million by July 2006.
MEDLINE records compose 85% of the PubMed data. In-process records (citations not yet indexed) are 1.4% of the PubMed total, while OLDMEDLINE records are 10.8%. PubMed-only records (items that are not indexed with MeSH) are 2.8% of the PubMed total.

PubMed usage continues to grow. From March 2005 to March 2006, the number of searches by unique IP address rose from nearly seven million to nearly 9.8 million unique IPs. The total number of searches went from 68 million to over 82 million searches. And during this time period, the number of page views displayed went from 294 million to over 377 million.

There have been numerous enhancements to PubMed this year. Among them are:

- Shared My NCBI accounts allow a library to establish a URL that activates filters thought to be helpful to patrons.
- Search links have been added to MeSH terms, Journal Title abbreviations, Grant ID data, Secondary Source ID data, and Personal Name as Subject data. These links allow users to select different options such as adding the term to your current search, or initiating a PubMed or other database search for the selected term (e.g., for MeSH terms, initiating a MeSH database search is an option).
- The Clipboard Contents Indicator is an asterisk (*) displayed on the Clipboard tab, indicating that content has been saved to the Clipboard.
- The new status indicator "PubMed - author manuscript in PMC" identifies citations that are found in PubMed Central as part of the NIH Public Access/Manuscript Submission System. An icon link to the free manuscript is also displayed in the Abstract and Citation views for these citations.
- Last Author Search option has been added to Single Citation Matcher.
- Search results can now be sorted by first or last author name.
- My NCBI Collections allow users to create and save lists of citations within their My NCBI accounts. These Collections can be reviewed, augmented, and deleted.
- The Limits feature of PubMed has undergone an extensive redesign, replacing pull-down lists with check box functions. In addition to enhancing the number of items that can be selected, it is now possible to select more than one item within each Limit list.
- The order of authors in PubMed citations has been changed so that personal and
corporate author names will reflect the same order used in the article.

- International Standard Randomised Controlled Trial Number (ISRCTN) and Wellcome Trust Grant Numbers have been added.

- When a search retrieval is only one citation, the default display for Entrez PubMed, Journals, MeSH and NLM Catalog is now a fuller view, such as the abstract view, instead of the summary view.

- Approximately 45,000 citations from 24 journals have been added to PubMed from the PubMed Central back issue scanning project.

- The MeSH database on Entrez now provides a PubMed - Major Topic selection within the Links feature.

- The Limits feature on the Journals database provides selections for searching only PubMed journals or journals currently indexed in MEDLINE.

**LinkOut**

The use of LinkOut has also increased, with 5,144 journals having LinkOut links. For PubMed citations, 35.1% have full text links and 7.9% have free full text links. These percentages are much higher for PubMed citations from 1999 on: 80.8% have full text links, and 16.3% have free full text links. The usage of LinkOut has increased over 20% from last year. There are now 24 million LinkOut hits per month, which is an astonishing one million LinkOut hits per work day.

The LinkOut for Libraries program has also seen an increase in participation. There are now:

- 1485 libraries participating as of May 15, 2006 - 246 more than at this time last year.
- 810 DOCLINE libraries show their serial holdings in LinkOut.
- 505 participating libraries are in countries outside of the U.S.

The LinkOut Submission Utility is undergoing a complete redesign to improve layout and add more functions. This work will combine the management of LinkOut, Outside Tool and Document Delivery Service.

**PubMed Central**

The use of full text articles in PubMed Central has increased. In April 2006, the number of unique IPs searching PMC for one month topped two million for the first time. As of the first of May, 246 journals are participating in PMC, up from 184 from last year. PMC now
covers over 675,000 articles.

**Training**
Between January 2005 and April 2006, over 1211 users participated in NLM training courses throughout the country, covering PubMed, NLM Gateway, ClinicalTrials.gov, TOXNET®, and the UMLS®. Other training related activities include:

- The new instructional resource, Basics of Medical Subject Headings (MeSH), is accessible from the PubMed Online Training page and the Distance Education page.
- The PubMed tutorial has been updated three times in the past year, the most recent version being released on May 17, 2006.
- 24 Quick Tours are now available on topics including PubMed, Gateway, LinkOut, and the NLM Catalog.
- Quick Tours received an NIH Plain Language Award in April 2006.

**NLM Technical Bulletin**
Several new features were added to the *NLM Technical Bulletin* in the past year:

- Search function allows searching of index text back to 1979 and the article text back to 1997.
- Print This Issue allows you to print an entire issue (closed issue).
- What Other Readers are Reading identifies the most read articles in the past month.
- E-mail Sign up - the e-mail notifies addressees of new articles and issue closure via NLM-Announces mailing list.
- RSS Feed allows users to receive notices about new articles.
- Skill Kit articles cover search hints, system features, and data and indexing topics for NLM databases.

**NLM Technical Services**
In January 2006, changes to Voyager allowed data to display in vernacular (non-Roman) characters. This functionality allows a user with the correct keyboard facilities to search records using vernacular characters. NLM's catalog includes over 4,000 records in the database in Japanese and Chinese vernacular characters.
The 2006 edition of the NLM Classification was made available online in April 2006. The classification incorporated changes from April 2005 to March 2006. An online tutorial for searching the NLM Classification was also made available to users.

A new Authority Index feature has been added to the NLM Catalog on Entrez. This new feature provides an index of full author names, organizations, and conference names, as well as series titles, associated with the bibliographic records. Three new Quick Tours for searching author names, corporate/conference names, and series title have also been made provided.

**Data Distribution**
The Data Distribution Program continues to grow with research areas in academics, biotechnology, and software development companies leading the way. There were over 350 MEDLINE licensees in FY2005, which is a 14% increase from the previous year. Of these licensees, 118 were non-USA licensees, a growth of 26% from the previous year.

**Unified Medical Language System® (UMLS®)**
There were three UMLS releases in 2005, and four releases are planned for 2006. The first 2006 release happened in February, and the second release occurred May 10, 2006. In addition to these releases, the MetamorphoSys software continues to be enhanced, improving functionality and usability.

**DailyMed**
DailyMed is a new Web site providing high quality information about marketed drugs. The available information includes the FDA approved labels (package inserts) provided by the drug manufacturers.

**Health Sciences Libraries Information Rx Tool Kit**
The Information Rx Tool Kit has been redesigned and reorganized for easier use. The site is now called the Health Sciences Libraries Information Rx Tool Kit, and provides a step-by-step guide to assist librarians with outreach activities.

**Specialized Information Services (SIS)**
Specialized Information Services (SIS) has also had a productive and busy year with a number of updates, changes, and new products:

- TOXMAP 2.4 was released.
• The 2004 Toxics Release Inventory was released on TOXNET.
• Tox Town added two additional scenes: "US-Mexico Border" and "Farm Scene."
• WebWiser was introduced, providing WISER functionality via Internet, without downloading software or data to desktop.
• Updates to Household Products Database and HazMap® were provided.
• The new database, LactMed, was launched, covering drugs and lactation.

MLA 2006: PowerPoint® Presentations for Meeting Remarks, MedlinePlus®, DOCLINE® and MeSH®

NLM Online Users' Meeting
Meeting Remarks - David Gillikin, Head, MEDLARS Management Section
PowerPoint® Presentations for Meeting Remarks, MedlinePlus®, DOCLINE® and MeSH
Questions and Answers
NLM Theater PowerPoint® Presentations
NLM Update PowerPoint® Presentation

The NLM Online Users' Meeting, held at the Annual Meeting of the Medical Library Association in Phoenix, AZ on May 22, 2006, was chaired by David Gillikin, Head of the MEDLARS Management Section (MMS) at the National Library of Medicine. The meeting brought users up-to-date on some of the Library's online systems as well as future plans. This year four PowerPoint presentations were given. Dr. Stuart Nelson, Head of the Medical Subject Headings section, spoke about the subheading reduction proposal [Editor's Note: See decision]; Joyce Backus, Head, Reference and Web Services Section, updated users on MedlinePlus; Maria Collins, Collection Access Section, updated users on DOCLINE; and David Gillikin, Head, MMS, gave the Online Users' Meeting Remarks.

These presentations were created in Microsoft® PowerPoint®. If you do not have PowerPoint, you can download the Microsoft Office PowerPoint viewer.
MLA 2006: Questions and Answers

[Editor's Note: Several of the Questions and Answers pertain to the subheading consolidation proposal. Please see decision].

NLM Online Users' Meeting
Meeting Remarks - David Gillikin, Head, MEDLARS Management Section
PowerPoint® Presentations for Meeting Remarks, MedlinePlus®, DOCLINE® and MeSH®
Questions and Answers
NLM Theater PowerPoint® Presentations
NLM Update PowerPoint® Presentation

Question:
I would like to get some input from the audience. As professional searchers, how many of you, when you are doing a comprehensive search, limit your search to just heading/subheading combinations? I would respectfully submit that the subheading combinations are for precision searching -- when you need to go through thirteen million PubMed citations and find a few things that have a specific role. If the general user does not use subheadings and the professional users do not use headings/subheadings for comprehensive searching then there is no reason to eliminate them even if some are not assigned by the indexers. Doing so will eliminate the precision for those of us who need to find a few ideal citations for our users in a specific area. Could you please explain why you are doing this when it doesn't seem to have anything but a negative effect on the searching capabilities of the database?

Answer - Dr. Nelson:
I think I have explained a number of good reasons to revise the subheadings. [Editor's Note: See Dr. Nelson's PowerPoint slides.] I didn't suggest eliminating the subheadings. I explained about skewed meanings and inappropriate use of subheadings. I don't think you are completely accurate in saying that the only reason not to do it is to improve precision. That is not the case; we have other problems and I addressed those issues. I talked about representational integrity, about special meanings. These are serious issues.

Question/Comment:
This seems to be a wonderful opportunity to go evidence-based. I am wondering what thought has been given to some form of test database, focus groups or data-mining -- simulations that could be used to test the questions that are coming up. We can have different layers of users making sure that all of these changes proposed have good effects or optimal effects. Your work is extremely important but to a huge audience. If you don't stratify your users all of these questions don't make any sense. I think that we need to get an expert group together representing different stake holders.
in order to settle some of these questions before the work gets done. I know what the costs are and I would really like to see that we do this in a cost-effective way.

**Answer - Dr. Nelson:**
There are a lot of serious questions about how to change this. There are fundamental problems in the whole information retrieval paradigm of understanding when you have found something that's relevant. There are a lot of problems with trying to test this out. The only person who can really understand whether something is relevant to a search is the user. You can know something well, and, therefore, the article that you are looking at is not helpful at all; it's essentially irrelevant at that point. There are other times when you don't know very much so that an article is quite helpful. Even measuring relevancy which is fundamental to information retrieval is a difficult task. One of the things that I have done is look for and ask what other information is available. There is somebody at NLM who is looking at developing semi-automated methods for assigning subheadings. One of the things that person is doing is looking at the indexing consistency data to find where subheadings are frequently confused, to find which ones have been used consistently with a much higher standard than the average. Right now all we have are average numbers, but within that, I am sure we are going to see a broad spectrum of subheadings that are easily confused as well as ones that are highly consistent. I think that is probably the best thing we can go on right now in terms of evidence.

**Question/Comment:**
As a great MEDLINE® fan for many years, my comment relates to the NLM Technical Bulletin of February 2006, where it was announced that the PubMed search tag [AB] was removed. [Editor's Note: Please see Technical Notes. NLM Tech Bull. 2006 Jan-Feb;(348):e1.] for the full announcement. I fully support the rationale behind removing the ability to tag with AB because it wasn't limiting the search to the abstract field at all and it seemed very sensible to remove that -- it was never a supported field limit. I think it was what you described as an alias for text word searching. Nonetheless, what my request is is that you actually instigate the ability to search in the abstract field. You are probably aware that the functionality exists at the moment to limit to both the title and the abstract concurrently with the [TIAB] tag, but for those of us who are interested in designing highly sensitive and highly precise search strategies, it is necessary to limit sometimes to the abstract only. For those of you who have seen the current issue of *Journal of the Medical Library Association (JMLA)*, we [Cochrane Collaboration] just have published a new highly sensitive search strategy for identifying Randomized Controlled Trials (RCTs) in MEDLINE. This relies on being able to search certain words in the abstract only, not the title and abstract. And, for example, that search strategy has improved the precision of the clinical queries that you currently have for the therapy filter from something like 25% to 40% precision, but you can only do this if you can search in the abstract only. We did the research in Ovid®, and for the benefit of people who don't have access to Ovid we translated this into PubMed. And of course we made the mistake of translating limits to abstract to the AB in square brackets. So I would like to request that you have a look at adding the ability to search only the abstract field.

**Answer - Mr. Gillikin:**
We examined a number of searches using a "sensitive" search strategy to see if an abstract-only search tag in PubMed would yield results significantly different than using [TIAB]. We did not see this. We have, therefore, decided against adding a new search tag at this time.

**Question/Comment:**
I would like to say that from all of the subheading announcements that we saw prior to this meeting, I never got the impression that we should go through each subheading and make a case for or against its relevance or why it made sense. From part of the discussion it sounds like maybe that's the kind of feedback that you would really prefer. Something that caught my attention from the letters that we saw posted to MEDLIB-L was that some people were okay with not having the secondary subheading but then I read that one cancer librarian was very concerned about not having it. How you balance that really depends on the kind of searching you are doing and also the utility of the
different subheadings that are available. The second question that I have is what happens to the system? How will changes in 2008 impact older citations? Will just everything from 2008 forward have the new subheadings? When I conduct a search will I need to take into account if it's abnormalities or birth defects? Do I also need to search with abnormalities for citations prior to 2008? Doesn't this make it more confusing and harder for people to find things when you have to know the cut off in your head to know how to construct your search?

**Answer - Dr. Nelson:**

Answering the second question first: Just as you do not have to change the MeSH® heading that you use to correspond to which year MeSH headings were assigned to MEDLINE citations, the same process will be applied to the subheadings. We do citation maintenance. It's a process which is not really well described. Susanne Humphrey wrote a paper about it a good number of years ago [Editor's Note: Humphrey S. File maintenance of MeSH headings in MEDLINE. J Am Soc Inf Sci. 1984 Jan;35(1):34-44. PMID: 10299333]. If you go to the MeSH Web site there is some other information including an XML of the actual transactions that we follow every year to do citation maintenance in order to maintain the upcoming year of MeSH. I expect to do exactly the same thing with subheading revisions so that, no, you won't have use two different systems of subheadings.

In reference to the first comment, the article that is on the MeSH Web site addressed the idea that I wanted to hear comments about usability, reproducibility and understandability. I really do welcome those kinds of comments. I look at it from the point of view of a professional who works in vocabulary development and I say that this system needs repair and needs to evolve. But for resolution, I look at the comments. What I do most of the time is look at requests, comments from the Index Section, comments from the catalogers, comments from people who deal with the users, and comments from individuals who work with the system. I try to balance all those things out. I will read the comments carefully and consider them. I want you to know that I do have an open mind about where we are. I was deliberately provocative in the draft that was sent out. I wanted to make people stop and think about everything being on the table. Let's think about what it is that we really want, what is it that we really need, and how do we make what we have better?

**Question:**

And so does that mean that you're open to adding subheadings instead of just eliminating them?

**Answer - Dr. Nelson:**

If you can make the case that it is useful, understandable and can be done reproducibly, then I am open to it. However, the more subheadings you have the less likely it is to be reproducible.

**Comment from David Gillikin:**

For those of you who have been sending comments to MEDLIB-L, please do not assume that NLM is reviewing comments from MEDLIB-L. If you have a comment, please go to the MeSH homepage and follow the instructions for sending in comments. They then are forwarded to Dr. Nelson. [Editor's Note: The deadline for comments was June 16, 2006.]

**Comment/Question:**

I did send Dr. Nelson a comment on /chemically induced with respect to Lupus and I'm happy to see that's been moved over into the save column. Thank you very much. My question has to do with searching. Are there any plans to make true adjacency searching possible in PubMed and if not, why, when so many other databases allow you to do this?

**Answer - Mr. Gillikin:**

While there are no plans currently to add another method for adjacency searching, we are always interested in examining how to make PubMed a better search tool. It will help us considerably if you can send us searches that do
not work for you using the current method of phrase searching. Please send your search examples for adjacency to: custserv@nlm.nih.gov.

**Question/Comment:**
My question is actually more of a request. We are finding that our clinicians and medical students are using Google™ Scholar. It's easy for them to get to Google Scholar when they are on-site -- our open URL links show up. We have open URL in PubMed as well and we use LinkOut®. I find that Clinical Queries is very popular among these clinicians and I would like to be able to have a direct link either from the Library Web page or hopefully some of the hospital Internet sites directly into Clinical Queries that would access our open URL links and our LinkOut. It's not realistic for everybody to go through and set up My NCBI filters throughout the hospital on the hospital computers so that those links are available. I'd like to see some sort of capacity for an individual link like we have through the Library Web site for our holdings to be available through Clinical Queries.

**Answer - Mr. Gillikin:**
Libraries can display the LinkOut icon through the Clinical Queries page. To do this, enter Clinical Queries using the following URL:

```
```
Replace NameAbbr with the provider's LinkOut User Name

Details can be found at the LinkOut homepage. Click on Libraries and then on Localize PubMed.

Additional information can also be found in the Technical Note, Displaying LinkOut and Outside Tool Icons When Using Single Citation Matcher and Clinical Queries. NLM Tech Bull. 2005 Jan-Feb;(342):e1.

**Question/Comment:**
I do a lot of PubMed training and I know that the National Training Center & Clearinghouse (NTCC) staff in its 8-hour PubMed class provides a brief overview of MeSH. As I travel around and train I find that most people are self taught when it comes to the MeSH vocabulary and I think that may be one of the problems. I think it would behoove the National Library of Medicine to develop a training class specifically on MeSH because at this time people are getting just a few minutes in the NTCC class. When I was reviewing comments about the subheadings I noticed that people were unaware of the fact that the subheadings are arranged in families and that they explode automatically in PubMed. This is basic information about using the MeSH vocabulary and it is not being effectively transmitted to people so a MeSH class would be helpful. This would be the logical vehicle to get the word out when the annual MeSH changes are made and instruct people on how those changes may effect their searching.

**Answer - Mr. Gillikin:**
Thank you for the suggestion. The current PubMed training class devotes one and one half hours to MeSH. In addition it is frequently discussed throughout other portions of the class. Also, please see the 12-minute video Branching Out: The MeSH® Vocabulary and the newest MeSH instructional resource, the Basics of Medical Subject Headings (MeSH).

**Question/Comment:**
I would like to see healthcare administration journals added as a separate subset in PubMed. We have a graduate healthcare administration program and we don't have many of the clinical journals in our library. I would like our students to be able to identify the journals that we are more likely to have and to be pertinent to their search.

**Answer - Mr. Gillikin:**
NLM doesn't have any plans to develop a healthcare administration subset for PubMed; however, if your library is a LinkOut participant you can establish a filter for your library's holdings. This filter can be part of a shared My NCBI account. The following links will take you to more details about LinkOut and creating a filter for a shared account:

- The LinkOut for Libraries Web page:
- Library LinkOut Filters Quick Tour:
- *NLM Technical Bulletin* article:

**Comment:**
I would like to thank you very much. I'm a huge fan of PubMed and enjoy the resources and I appreciate all your hard work.

**Question/Comment:**
When I teach doctors or students I tell them to be aware when using MeSH because all in-process and publisher-supplied citations are not indexed. I tell them to use a keyword search term instead of going to the MeSH database. I say that because we tend to teach doctors to use MeSH and we emphasize it. If you want the most recent citations to the hot topics or those articles that just came in (and NLM does a wonderful job of putting them in for us to access -- there are a large number that are supplied by publisher and are available only electronically) these are not indexed yet as well. When I look in the Details I also realize that when you use MeSH you don't cover some of the terms that are being used by the author that are not really matching with the MeSH. I find it makes a big difference. Librarians might want to be aware of that.

**Answer - Mr. Gillikin:**
That is a good point. In fact, most PubMed searchers use "Google-style" subject searching, i.e., they enter the topics of interest and do not specify terms as being MeSH. Example:

```
behcet disease small bowel
```

Users are comfortable searching using their own terminology and while many seem to appreciate the value of MeSH vocabulary and NLM's indexing, they do not rely on it for searching. This is OK because PubMed has extensive mapping capabilities that allow it to recognize the user's terminology as entry terms for MeSH headings or subheadings and incorporate them into the search.

**Answer - Dr. Nelson:**
I think what you are talking about is trying to go from a MeSH heading to a query expansion to get other types of commonly used text words and phases. Is that essentially what you are suggesting?

**Attendee:**
Yes.

**Answer - Dr. Nelson:**
What you do need to know is that there is a mapping file that sits behind the scenes and maps free text searching to MeSH and it's quite a large file. It's about 500,000 lines, each line being a single mapping. If there are terms in the vernacular or colloquial terms or frequently used terms that you don't find getting mapped to MeSH headings, please
send those to me as a suggestion. We have the ability to add things to that file. Going from telling someone to use a MeSH heading and then to pull in other text words I think will likely cause problems. Most experiments that were done in that regard have shown that it actually detracts from the quality of the retrieval.

**Question/Comment:**
I teach classes for nurses and anytime you type in *hospice nursing* you get breast feeding articles because of that mapping of nursing and breast feeding. I have sent several e-mails to the MeSH section and NLM with no response. I just wanted to let you know formally that I hope this can be changed.

**Answer - Dr. Nelson:**
I suspect that what is happening is that nursing is being mapped to breast feeding. In fact, that is a common use and there are many times in the mapping file where there are mappings to several different meanings. For example, "cold" gets mapped three different ways. The problem is your users want a specific meaning and they want to exclude the other meaning of the same word. Unfortunately, we can't do that because the next person that comes along is going to want the other meaning for that specific word and that's where it becomes a problem.

**Comment:**
Thank you very much for making available products like PubMed Central® and Bookshelf. They are wonderful.

**Question/Comment:**
I am a grassroots librarian now after having run some big libraries. I love that you added the capability to limit searches to PubMed citations having links to either full text or free full text. It is really wonderful for our small college because we have ten doctoral students who don't have the money to go out and get the full text and we don't have the money to pay commercial services so this is just a great capability that you recently added. [Editor's Note: For further information on limiting your search results to include full text see: PubMed® Limits Page Updated. NLM Tech Bull. 2006 Mar-Apr;(349):e2. ] [Editor's Note: At this point, the taping service failed to capture the remaining portion of the meeting. The following questions were recreated from staff notes.] I would like more Oriental Medicine titles to be added to the database. I would like training telecasts and more distance education.

**Question:**
Is it a rumor that MeSH was developed by linguists?

**Answer - Ms. Humphreys:**
Yes, it is a rumor. MeSH reflects influences from a variety of disciplines (including linguistics), but the person most responsible for its development was former NLM Director Frank Bradway Rogers, M.D., M.L.S. Winifred Sewell, Ph.D. was its first full-time editor. Those who are interested in the early development of MeSH and the work that led up to the development of MEDLARS should consult Scott Adams' 1972 Janet Doe lecture, "The Way of the Innovator: Notes Toward a Pre-History of MEDLARS" published in the *Bulletin of the Medical Library Association* and available in PubMed Central at: http://www.pubmedcentral.gov/pagerender.fcgi?artid=197742&pageindex=1#page
July 17, 2006 [posted]

MLA 2006: NLM® Theater PowerPoint® Presentations

NLM Online Users' Meeting
Meeting Remarks - David Gillikin, Head, MEDLARS Management Section
PowerPoint® Presentations for Meeting Remarks, MedlinePlus®, DOCLINE® and MeSH® Questions and Answers
NLM Theater PowerPoint® Presentations
NLM Update PowerPoint® Presentation

The NLM exhibit booth at the Annual Meeting of the Medical Library Association featured theater presentations to bring users up-to-date on some of the Library's products and services. This year, the following presentations were offered:

- Bookshelf
- ClinicalTrials.gov
- Genetics Home Reference®
- LinkOut® Update
- NLM Gateway
- PubMed Central® Update
- PubMed® Review
- What's New with MedlinePlus®, Go Local & NIHSeniorHealth?
- Unified Medical Language System® (UMLS®)
- Your Environment & Your Health

These presentations were created in Microsoft® PowerPoint®. If you do not have PowerPoint, you can download the Microsoft Office PowerPoint viewer.

July 17, 2006 [posted]

MLA 2006: NLM® Update PowerPoint® Presentations

NLM Online Users' Meeting
   Meeting Remarks - David Gillikin, Head, MEDLARS Management Section
   PowerPoint® Presentations for Meeting Remarks, MedlinePlus® and DOCLINE®
   Questions and Answers
NLM Theater PowerPoint® Presentations
   ➤ NLM Update PowerPoint® Presentations

The NLM Update was held at the Annual Meeting of the Medical Library Association in Phoenix, AZ, on May 23, 2006. There were three presentations given at this year's update. Dr. Donald A.B. Lindberg, Director, brought users up-to-date on some of the Library's programs as well as future plans; Angela Ruffin, Head, National Network Office, gave an update on NN/LM activities; and Becky Lyon, Deputy Associate Director, Library Operations, gave the Library Operations update.

Angela Ruffin's and Becky Lyon's PowerPoint presentations are available as one file. Please forward to slide 22 for the Library Operations update. No PowerPoint presentation is available for Dr. Lindberg's update.

These presentations were created in Microsoft® PowerPoint. If you do not have PowerPoint, you can download the Microsoft Office PowerPoint viewer.

July 25, 2006 [posted]

PubMed Central®: New Journals Participating and New Content Added

New Journals Participating

Acta Veterinaria Scandinavica

The journal *Acta Veterinaria Scandinavica* is now participating in PubMed Central, beginning with issue 2006;48. *Acta Veterinaria Scandinavica* is an open access journal.

*Acta Veterinaria Scandinavica*
ISSN: 0044-605X (Print)
ISSN: 1751-0147 (Electronic)
Title Abbreviation: Acta Vet Scand
Publisher: BioMed Central
NLM ID: 0370400
PMC Full text coverage: from 2006;48.
PMC URL: http://www.pubmedcentral.gov/tocrender.fcgi?action=archive&journal=424

Molecular Neurodegeneration

The journal *Molecular Neurodegeneration* is now participating in PubMed Central, beginning with issue 2006;1. *Molecular Neurodegeneration* is an open access journal.

*Molecular Neurodegeneration*
ISSN: 1750-1326 (Electronic)
Title Abbreviation: Mol Neurodegener
Publisher: BioMed Central
NLM ID: 101266600
PMC Full text coverage: from 2006;1.
PMC URL: http://www.pubmedcentral.gov/tocrender.fcgi?action=archive&journal=425

Carbon Balance and Management

The journal *Carbon Balance and Management* is now participating in PubMed Central, beginning with issue 2006;1. *Carbon Balance and Management* is an open access journal.

*Carbon Balance and Management*
ISSN: 1750-0680 (Electronic)
Title Abbreviation: Carbon Balance Manag
Publisher: BioMed Central
NLM ID: 101271519
PMC Full text coverage: from 2006;1.
PMC URL: http://www.pubmedcentral.gov/tocrender.fcgi?action=archive&journal=426

*Journal of General Internal Medicine*

The journal *Journal of General Internal Medicine* is now participating in PubMed Central, beginning with issue 1997 Jan;12(1) to 2006;21(7). Current content is forthcoming and will have a 12-month delay.

*Journal of General Internal Medicine*
ISSN: 0884-8734 (Print)
ISSN: 1525-1497 (Electronic)
Title Abbreviation: J Gen Intern Med
Publisher: Blackwell Publishing
NLM ID: 8605834
PMC Full text coverage: from 1997 Jan;12(1) to 2006 Jul;20(7).
PMC URL: http://www.pubmedcentral.gov/tocrender.fcgi?action=archive&journal=227

**W2 Serial Cutter Practice**

Beginning August 1, 2006, NLM® will no longer recutter older serials in the W2 collection that contain cutters beginning with the letter "Z." In the past, when resources were not available to catalog serials upon receipt, a number of older serials in the W2 collection (government administrative reports or statistics) were assigned the "Z" cutter as a placeholder to allow them to be temporarily shelved before cataloging was completed and the correct main entry determined for these titles. These serials all have a Table G number assigned, so they have the appropriate geographic breakdown, and are shelved with other reports from that country.

Currently, when catalogers complete the cataloging on these titles, they have been removing the "Z" cutter and replacing it with a cutter that represents the main entry. This requires that the items then be relabeled and reshelved. Keeping the original cutter will save time in cataloging, labeling and reshelving, and reflects the fact that over the years, the cutter assigned to all serials in NLM's collection often signifies nothing more than a shelving location, as serial title changes keep the cutters of the previous titles.

This policy only applies to older titles in the backlog which already have assigned call numbers (approximately 700 titles). New serials in the W2 collection will continue to receive appropriate Table G numbers and cutters reflecting their main entry.

**By Diane Boehr**

Cataloging Section, Technical Services Division

August 10, 2006 [posted]

TOXLINE® Unified

A new version of the National Library of Medicine® (NLM) TOXLINE was released on TOXNET on Tuesday, July 18 (see Figure 1). Search results from the two parts of TOXLINE®, TOXLINE Core and TOXLINE Special, are now merged. TOXLINE Core was the PubMed®/MEDLINE® toxicology subset and TOXLINE Special captured other literature (special journal and other research literature, technical reports and research projects, and archival materials). This change allows all results to be relevancy ranked in the same way, with results displayed in only one window (see Figure 2). A similar merged interface will be provided for the Developmental and Reproductive Toxicology/Environmental Teratology Information Center (DART®/ETIC) database in the Fall.

TOXNET offers features such as relevancy ranking and flexible sorting and downloading options. Relevancy ranking attempts to determine which documents are most pertinent to the search, and to place those documents first in the list of results. The ranking is based upon the number of individual search terms occurring in a document, the number of times each search term occurs in a document, its rarity within the database, and the nearness of search terms to each other. Documents containing combinations of search words tend to be ranked higher than documents having isolated occurrences of the words.
Figure 1: New TOXLINe Search Page.

<table>
<thead>
<tr>
<th>Select Database</th>
<th>Search TOXLINe</th>
<th>Env. Health &amp; Toxicology</th>
</tr>
</thead>
<tbody>
<tr>
<td>· ChemIDplus</td>
<td>nanotechnology</td>
<td>Portal to environmental</td>
</tr>
<tr>
<td>· HSDB</td>
<td>(e.g. asphalt fumes, roamers, calcium)</td>
<td>health and toxicology</td>
</tr>
<tr>
<td>· TOXLINe</td>
<td>aging, Neville DM autoimmune)</td>
<td>resources</td>
</tr>
<tr>
<td>· CCRIS</td>
<td>Search Clear Help</td>
<td>Support Pages</td>
</tr>
<tr>
<td>· DART</td>
<td>For chemicals, add synonyms and CAS numbers to search:</td>
<td>Help</td>
</tr>
<tr>
<td>· GENETOX</td>
<td>Yes No</td>
<td></td>
</tr>
<tr>
<td>· IRIS</td>
<td>Search Limits</td>
<td></td>
</tr>
<tr>
<td>· ITER</td>
<td>Browse the Index</td>
<td></td>
</tr>
<tr>
<td>· LactMed</td>
<td></td>
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</tr>
<tr>
<td>· Multi-Database</td>
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<td>· TRI</td>
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<tr>
<td>· Haz-Map</td>
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<td>· Household Products</td>
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<td>· TOXMAP</td>
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<tr>
<td>· TOXNET Home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: New TOXLINe Search Page.

<table>
<thead>
<tr>
<th>TOXLINe Search Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>nanotechnology Search Clear Limits</td>
</tr>
<tr>
<td>For chemicals, add synonyms and CAS numbers to search: Yes No</td>
</tr>
</tbody>
</table>

Items 1 through 20 of 568

Page 1 of 29 Go to page

References are sorted in relevancy ranked order. Click on Sort to change the order of the retrieved References.

<table>
<thead>
<tr>
<th>Select Record</th>
<th>Reference</th>
</tr>
</thead>
</table>

Figure 2: TOXLINE’s new merged format for Search Results.

More information about TOXLINE can be found on the TOXLINE Fact Sheet or by emailing tehip@teh.nlm.nih.gov.

By Colette Hochstein
Division of Specialized Information Services

August 10, 2006 [posted]

NLM® Training Program: 2007

The 2007 schedule of NLM online searching training classes is available. These classes, along with the remainder of the year 2006 classes, may be found at the http://nnlm.gov/ntcc/schedule.html.

Classes Offered

NLM Training: PubMed®
- Full-day class
- 7.5 Medical Library Association (MLA) continuing education credits
- Cost: free

This class is designed to teach students how to use PubMed which includes MEDLINE® citations. It also includes an overview of the Medical Subject Headings® (MeSH®) and its importance as a tool to both searchers and indexers.

NLM Training: NLM Gateway & ClinicalTrials.gov
- Half-day class
- 3.5 MLA continuing education credits
- Cost: free

This class is designed to teach students how to use the NLM Gateway. The NLM Gateway is a Web-based system that allows users to search simultaneously in multiple NLM retrieval systems. This class also includes a discussion and demonstration of ClinicalTrials.gov.

NLM Training: TOXNET®
- Full-day class
- 6 MLA continuing education credits
- Cost: free

This class is designed to convey the basics of searching TOXNET, the NLM Web-based system of databases in the areas of toxicology, environmental health, and related subjects. Students learn the content and structure of files covering toxicology data, toxicology literature, toxic releases, and chemical searching and nomenclature. Among the databases highlighted are TOXLINE®, the Hazardous Substances Data Bank (HSDB®), the Integrated Risk Information System (IRIS), the Toxic Release Inventory, and ChemIDplus®. The Toxicology and Environmental Health Information Program (TEHIP) Web site is introduced, as well as some additional special resources developed in this subject area by NLM.
How to Apply
View the training class schedule and register online for classes at the National Training Center & Clearinghouse (NTCC) Web site at http://nnlm.gov/ntcc/schedule.html. Every attempt will be made to place training applicants in the class requested. If a class is filled, applicants will be registered for their second choice and will also automatically be placed on the wait list for their first choice. Please note that all classes are considered "tentative," pending the required minimum enrollment being met one month before the class. Approximately one month prior to the class, registrants will receive information on hotels and local site arrangements. Information on location of training sites and links to many of the sites’ Web pages are available from the NTCC Web site.

Each Person Makes a Difference
Our classes are in demand and usually fill rapidly, often creating a waiting list. In order to help us provide training opportunities to as many people as possible, please notify the NTCC office if you have registered for a class and your plans change. The more advance notice you give us, the more likely it is that someone else can take the available space. It is very disappointing to begin a class with empty chairs that could have been occupied. We are asking for your cooperation to help allow as many people as possible to benefit from this free training program.

Questions/More Information
If you have questions or need additional information, please contact:

The National Training Center & Clearinghouse
ntcc@nyam.org
800-338-7657 (press 2) or
212-822-7396
or
NLM Customer Service
custserv@nlm.nih.gov
888-FINDNLM (888-346-3656)

By Janet Zipser
MEDLARS Management Section