Changing Vocabularies: A Guide to Help Bioethics Searchers Find Relevant Literature in National Library of Medicine Databases Using the Medical Subject Headings (MeSH) Indexing Vocabulary

2005 Update: Searching the NLM Catalog in Lieu of LOCATORplus

In September 2004, the National Library of Medicine announced the creation of the NLM Catalog, which uses PubMed’s search interface to retrieve the bibliographic records resident in LOCATORplus. It supports enhanced subject searching for monographic materials by providing the capability to designate whether a MeSH term is a major or a secondary topic of discussion, and by automatically retrieving hierarchies of broader and narrower MeSH terms unless the searcher specifies that only records indexed with the broadest term are wanted.

The NLM Catalog also offers searchers the capability to select from a list of retrieved citations (by checking next to the citation) whichever citations are wanted, and then to display/print all of the selected records in the searcher’s preferred format at one time, rather than citation by citation as is required by LOCATORplus. The occasional NLM Catalog searcher who wants the full MARC record cataloging detail, which is provided only by LOCATORplus, can link to record in that database by clicking the unique NLM ID number that appears at the bottom of each citation record.

The NLM Catalog is easily accessible from the PubMed homepage (www.pubmed). It can be selected either from the “Search” pull-down menu under ‘All Databases’ or from the sidebar under ‘Related Resources’.

Searching the NLM Catalog

Searching the NLM Catalog is nearly identical to searching MEDLINE/PubMed, which makes it easy in most cases to search the journals database and then repeat the search in the monographic database without changing the search strategy. The chief exception relevant to bioethics searchers is that the NLM Catalog has no “Subsets” Limit from which the Bioethics Subset can be selected from a pull-down menu. A simple method for achieving the equivalent of a bioethics subset limit is described below under ‘Limiting Retrieval to Bioethics-Related Materials in the NLM Catalog’.

As described above in Section II-B., either free text words or MeSH Headings can be entered into the query box (and then searched by pressing the Enter key or clicking Go). Multiword phrases can be input in natural word order. Those phrases that constitute MeSH Headings or entry terms to MeSH Headings will retrieve both the free text term and the MeSH Heading with all of its subordinate Headings.
A topic indexed by a MeSH Heading can be “majored,” i.e., focused on as a major topic of discussion, by keying majr (for “major”) in brackets after the term, as follows:

informed consent [majr]

The above search will retrieve citations that focus on informed consent or any of its subordinate terms in the MeSH hierarchy: consent forms; parental consent; or third-party consent.

The search could be limited to citations focused on the broad topic “informed consent,” and not on its more specific subordinate terms, by specifying that the term not be “exploded,” as follows:

informed consent [majr:noexp]

The Boolean operators AND, OR, and NOT can be used to connect terms, or sets of terms within parentheses, as in MEDLINE/PubMed searching:

(genetic screening [majr] OR genetic counseling [majr]) AND (great britain OR europe) AND empirical

Non-subject data fields that can now be searched similarly to MEDLINE/PubMed include authors [au], title words [ti], and publication types [pt].

Although the NLM Catalog supports searching for MeSH Subheadings, the advice to be very cautious in using them to search MEDLINE (see Section II-C. above) holds even more strongly for searches of the NLM Catalog, because subheadings are indexed much less frequently in the monographic database.

**Limiting Retrieval to Bioethics-Related Materials in the NLM Catalog**

The simple phrase:

AND (ethics OR kie)

added to any search strategy will limit retrieval to citations that contain the word ‘ethics’ in the text, that are indexed with the MeSH Heading Ethics or any term subordinate to Ethics in the MeSH hierarchy or with the Subheading ‘ethics’, or that have been created or modified by Kennedy Institute of Ethics (KIE) indexers.

Example:

(clinical trials [majr] OR human experimentation [majr]) AND (ethics OR kie)
Searching the NLM Catalog Through the NLM Gateway

The NLM Gateway, which searches multiple NLM databases simultaneously (see Section IV. above), now accesses books and other monographic materials via the NLM Catalog rather than via LOCATORplus. This approach incorporates MEDLINE/PubMed’s better search capabilities for retrieving subjects, authors, date ranges, and lack of a limit on the number of records retrieved.

Bioethics searchers should be aware, however, that the ‘Bioethics Subset’ Limit option offered by the Gateway works correctly only for MEDLINE/PubMed journal citations, where it provides optimum ethics-related retrieval.

To retrieve NLM Catalog monographic citations on the ethical aspects of a subject, the search should be repeated with the Limit option turned off and the phrase:

   AND (ethics OR kie)

added to the search statement.