Using the TOOLS Feature to Find Medical Subject Headings (MeSH)

<table>
<thead>
<tr>
<th>FUNCTION</th>
<th>ICON</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tools Menu</td>
<td>Wrench</td>
<td>Access to Permuted Index, type in your term, then select from list</td>
</tr>
<tr>
<td>Scope Note</td>
<td>Click on “i”</td>
<td>Working definition of subject heading, when the it started to be used</td>
</tr>
<tr>
<td>Tree Listing</td>
<td>Click on term</td>
<td>Hierarchical display of related terms, select broader or narrower terms</td>
</tr>
<tr>
<td>Explode</td>
<td>1st Check box to right of term</td>
<td>Selects all of the narrower, related terms within a tree</td>
</tr>
</tbody>
</table>

Purpose of Tools
Search the MEDLINE vocabulary for appropriate subject headings (MeSH), tree designation

Advantages of using Tools in your searches
- Comprehensive overview of the available subject headings
- The definition of the term(s) and when the term(s) started to be used as a subject heading along with the previously used subject headings.

General Steps in using “TOOLS”
1. On the main search page, click on the wrench icon at the top of the page labeled TOOLS.
2. Using your mouse, click inside the radio button beside “Permuted Index”.
3. For your first search concept, type in the single most appropriate word to describe the topic (this can only be one word).
4. A list of terms that contain your search term will appear. Scroll to an appropriate term.
5. To the far right of the terms, there is an icon with an “i”. Click on the one beside your term to retrieve a Scope Note. It provides a working definition of the subject heading, the year the term started to be used, and the previous indexing terms if it is a new heading. Check this feature routinely to make sure the terms you are using are appropriate for the years in which you are searching. You may have to use the older MeSH terms if you are searching older databases. Once you are finished looking at the scope note, click on the PREVIOUS PAGE button.
6. You now are back in your original list. To look at the Tree display, click on your term. The Tree display will show you the related subject headings and give you an idea of what related terms are available for searching. The indexing default is to the most specific aspect of the topic first, so select all possible related headings.
7. To select the most appropriate terms in the tree listing, either checking off the boxes to the left of each term, or cursor to the most appropriate general term, and check off the first box to the right of the term. This will Explode all of the related terms listed in the tree. Click on CONTINUE at the top of your screen.
8. You now will be prompted to select some sub-headings, or take all of them. If you are combining more than one subject, it is recommended that you take ALL sub-headings.
9. Click on CONTINUE. You will be back at the main search screen. You search term should be displayed along with the number of hits.
10. Repeat steps 1-9 as often as needed until you all of the terms required in your search.
Shortcuts to any of the TOOLS functions

To go directly to the Permuted Index

type ptx word (e.g. ptx interferons), where “word” is the term that best describes your topic. Hit the “Enter” key.

To look up a Scope Note

type scope “MeSH term” (e.g. scope interferons), where “MeSH” is the known subject heading term. Hit the “Enter” key.

To look directly at a MeSH Tree

type tree MeSH term (e.g. tree interferons), where “MeSH” is the known subject heading. Hit the “Enter” key.

Specific Search Example

Search Topic:  
I need to find articles on the use of interferons in treating non-Hodgkin’s lymphoma.

Search strategy:  A and B

Tools:
1) Click on the TOOLS wrench. Select the Permuted Index, Type interferons in the search box.
2) Hit the “Enter” key or click on PERFORM SEARCH.
3) Scroll down to the general subject heading interferons.
4) Click on the “i” to the far right of the term and read the scope note.
5) Does the entry under interferons have a “year of entry” section? If it does, do you need to consider adding additional terms to your search to retrieve older material before interferons became a heading? If yes, make note of these terms.
6) Click on the PREVIOUS PAGE button once you have finished reading the scope note box.
7) Click on the term to look at the tree display. Scroll down the tree. The term will be highlighted.
8) Explode this term in order to select all types of interferons by checking off the first box to the right of the term. Or, to choose only the types of interferons that would be appropriate, just check off the boxes to the left of each term. Hit the CONTINUE key.
9) Click on CONTINUE to take all sub-headings. Search results are posted to the main search window.
10) Click on the TOOLS wrench to go back to the Permuted Index screen
11) In the search box type lymphoma.
12) Repeat steps 2 to 9 with the lymphoma term
13) Your Main Search Window screen will look like this

1. exp interferons/ 12765
2. exp lymphoma, Non-Hodgkin/ 8216
3. 1 and 2 185
4. limit 3 to (human and english) 153