1 - PRELIMINARY SURVEY - RETRIEVING REVIEW CITATIONS FROM MEDLINE

DoctorInternet

Without much in the way of preparation or background, let's move right into doing some useful research. Later, we will discuss basic principles and methodology.

The first objective when researching any subject is to gain a current overview of your topic. This is done by retrieving the most recent, "review" citations in the MEDLINE database for the particular subject about which you are interested. This axiom, "first retrieve review citations from MEDLINE", applies to all groups (professional, facilitator, patient) and for all bio-medical topics (including psychology). As scientific literature accumulates, experts in particular fields periodically go over the more recent findings in order to expand and update the established body of knowledge by incorporating the new information. The bibliographers at the National Library of Medicine identify these consolidations as "review" articles. The experts who write review articles do a lot of work for you. If you retrieve about 500 such citations, then that will usually provide a comprehensive, current overview, transecting all aspects of your subject, from diagnostics to the various therapeutic modalities, including the numerous aspects of basic research. (Note: the MEDLINE database has various retrieval "front-ends" or search engines, e.g., PubMed, Gateway, and those constructed by other agencies. However, the database for each system is identical. We will use the PubMed search engine because it provides greater specificity.)

Note: An expert summary of these procedures is provided on page 33. Once you have gone through these routines several times, those instructions will probably be sufficient to remind you. (Again, our apologies for the appearance of drawing a lot of lines between the text and the appropriate section in the graphics. However inelegant this may look, it is useful to the new user.)

1.1   Activate your Internet browser. At the very **top of the browser** is a section for typing in the URL (**U**niversal **R**esource **L**ocator), which is the address of the site. In that section, type and send the following:

<div align="center">

http://www.ncbi.nlm.nih.gov/PubMed

</div>

Translated, this means: **N**ational **C**enter for **B**iotechnology **I**nformation **.** **N**ational **L**ibrary of **M**edicine **.** **N**ational **I**nstitutes of **H**ealth **.** **Go**vernment / **PubMed**.

Note. Many people make the mistake of typing the URL in the **host search box**. That is for searching only in the computer of the web-site to which you are logged. Typing the URL in there will not get you connected to the desired web-site.

1.2   This takes you to the home-page of PubMed. You may want to bookmark this page for future reference (type Ctrl-D or use your browser functions). Several basic functions are noted. The "**Search**" section designates the database to be searched. The default is PubMed, which is MEDLINE; and you will leave that as is. (The others are for more specialized technical interests and are explained by selecting the particular link.) There is a **query box** for typing in your term(s) and a "**Go**" button which sends the command to find and retrieve the citations.
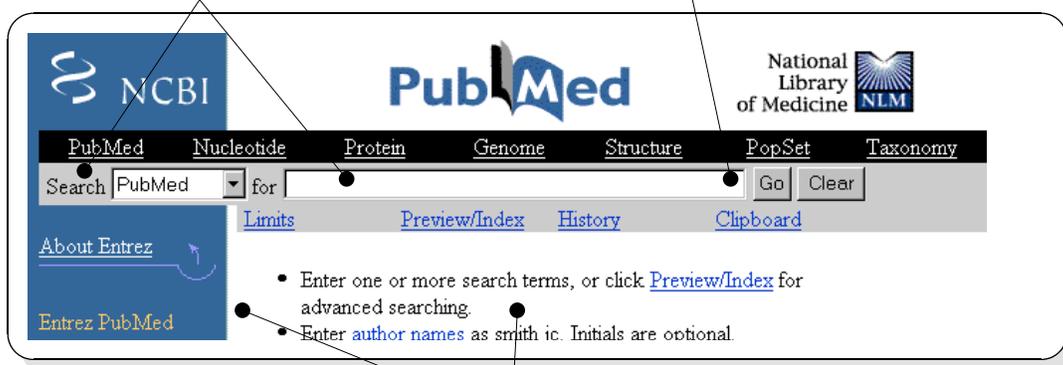
Then there are various functions in the **column to the far left**; and they will be explained in due course. The center area is for the **display** of information.

1.3   Initiate A Search. Follow these instructions to the letter. It is easy to get lost. Type your subject of interest in the **query box** and then select **Go** .
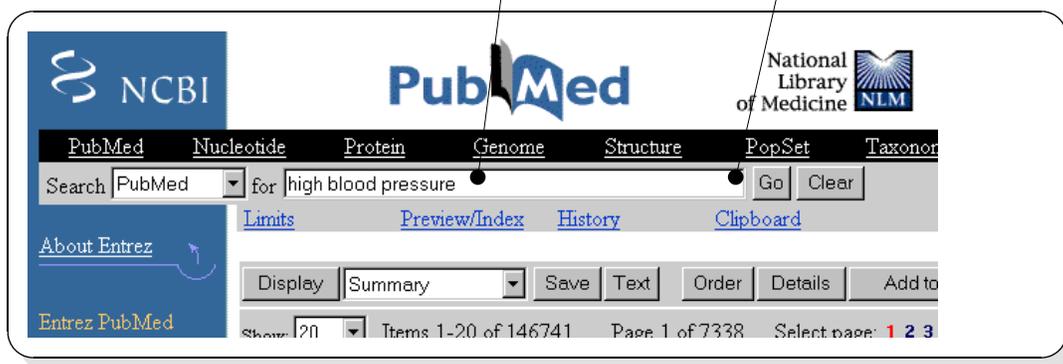
1.4 Preliminary Search Results. For the purpose of demonstration, we will use the topic of "high blood pressure"; but you should use your own term. Initially, just use the terminology which you think is correct. The selection of proper medical terms is important for accurate searching, and that will be discussed shortly. Also, for now, confine this search to one topic. Eventually, you will learn how to correlate two or more subjects. For this demonstration, just get use to the main functions and do not be concerned with the information. If you get zero citations, then try another term which is more appropriate. Several components are noted. First, the default, display format is "**Summary**"; and you will usually use a different one called "Abstract". The retrieval will "**Show**" a default number of citations of 20 per page; and you will usually increase that to a greater number.
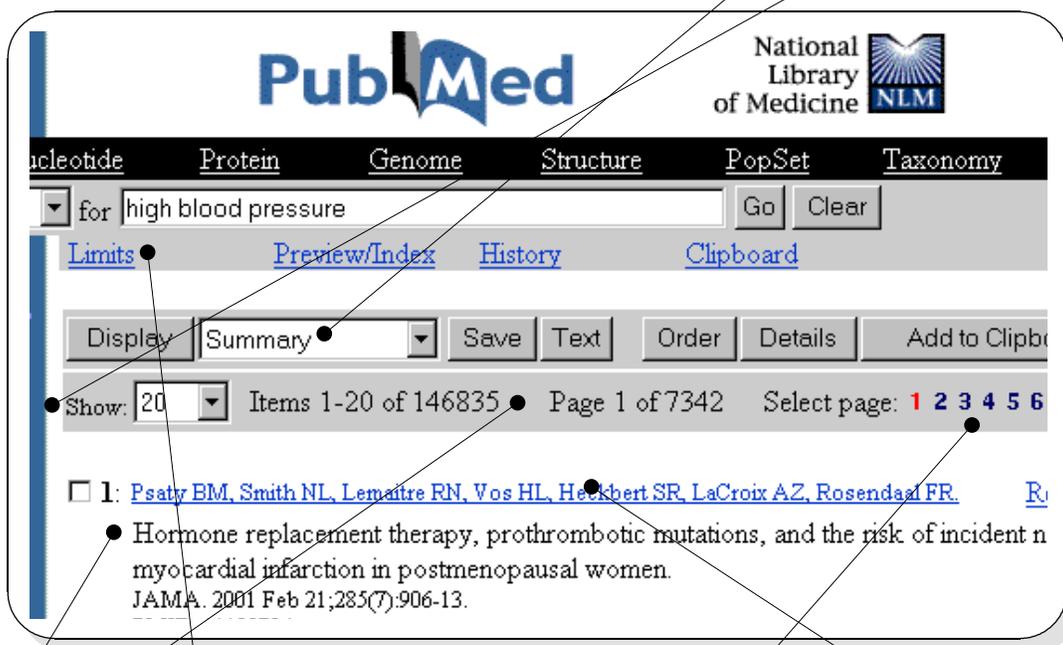
The **total number** of citations in the database for your subject is indicated. The **Summary display** reports the Authors, Title, Journal, and Identification number. The **Author** field is a link to the full report. Select it to see a full citation, then use the "Back" button of your browser to return to the primary screen. Scroll up and down to review the various citations; and to view subsequent pages, **select page 2, 3, et seq**.

Now, select the "**Limits**" function.

1.5   Using the   Limits   option. In your first pass, all articles which have been associ-
ated with "high blood pressure" were retrieved. However, the number is usually too large
to be useful; and our primary objective in this Preliminary Survey is to retrieve only
"Review" citations. Here is where you specific that type of publication. Select the pop-up
menu for "**Publication Types**". (The other, "Limits" options will be discussed later.)

Select "**Review**".

Then, select "**Go**".

Your search will be
redone, selecting
only review articles
on your subject.

1.6   Define Other Options. Note that your "**Limits**" are set to "**Review**". Now, define the "**Display**" and "**Show**" options.
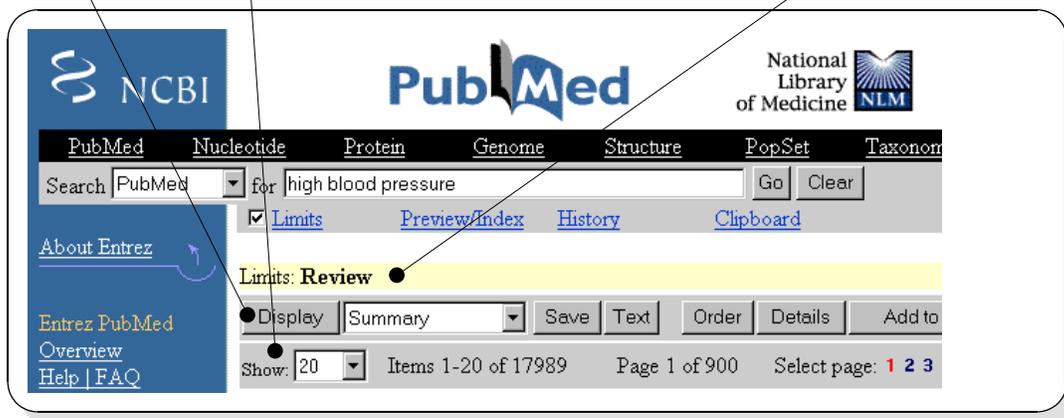
In the **pull-down menu** of the "Display", select "**Abstract**". This retrieves the abstract for each citation - 80% will have one.
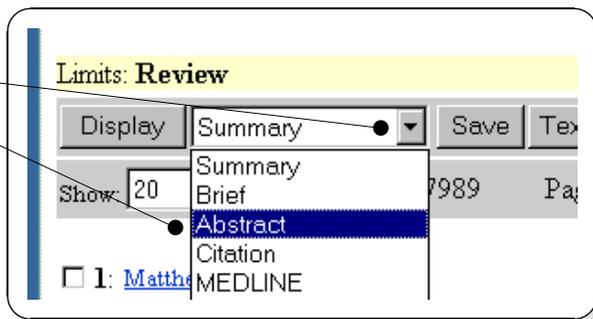
In the pop-up menu of "**Show**", select 200. This retrieves **200** review citations on you subject.
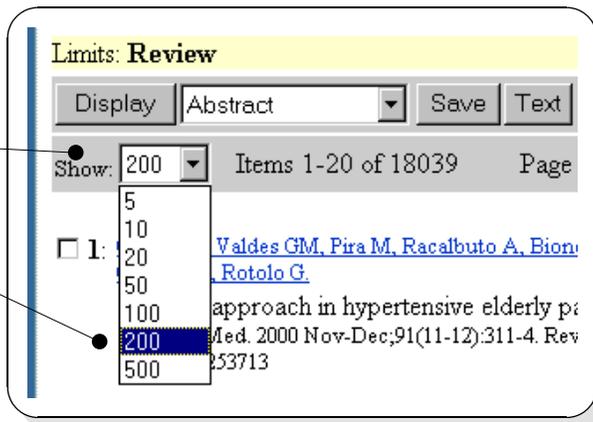
1.7   Execute Your Reconstructed Search. All of the parameters are now set as follows. You will be doing a search in the database called "**PubMed**/MEDLINE" for "**your subject**" with "**Limits**" set for "**Review**" publications, displaying in the "**Abstract**" format and showing "**200**". All of the preceding may seemed like a lot of steps; but remember that when you execute your search, the computer will be "looking through" over 11,000,000 records, in a matter of seconds, to extract only those which are likely to be of some relevance to your particular interests, as you have defined them.
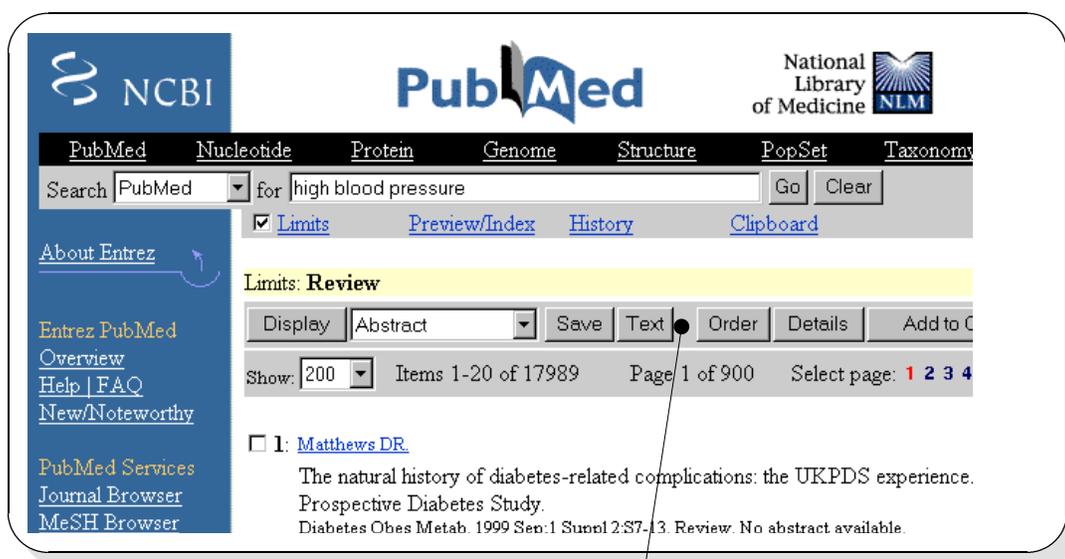
Various retrieval options are available. However, the simplest and best is simply to download the entire 200 citations by selecting the "**Text**" button. That activates the search and retrieval.

1.8   The retrieval is displayed in text format.

When you selected "Text", your retrieval will look like this. The various elements of each are:
the "**Journal**" of publication,
the "**Title**" of the report,
the "**Investigators**",
the "**Location**" of the investigators,
the "**Abstract**" of the report.

Netscape - [Entrez-PubMed]
File Edit View Go Bookmarks Options Directory Window Help
Back Forward Home Reload Images Open Print Find
Location: http://www.ncbi.nlm.nih.gov:80/entrez/query.fcgi?CMD=Text&DB=PubM

1: J Gastroenterol 2000;35(3):235-9

Idiopathic portal hypertension associated with syste

Inagaki H, Nonami T, Kawagoe T, Miwa T, Hosono J, Ku
Takagi H, Suzuki H, Sakamoto J

Department of Surgery, Aichi Prefectural Hospital, F
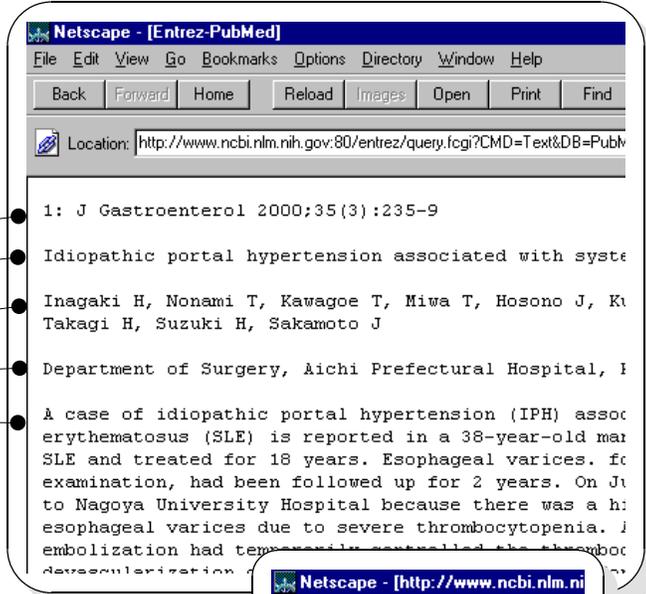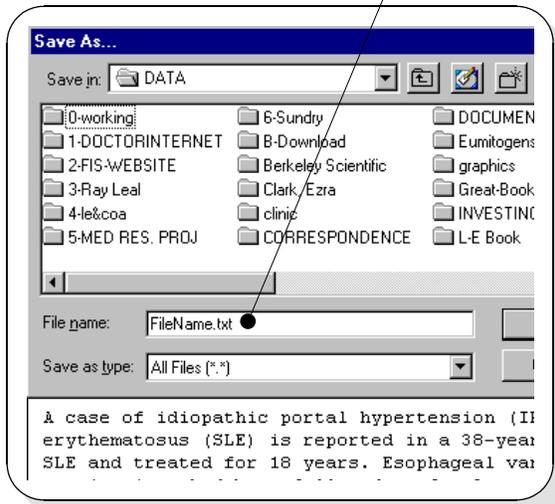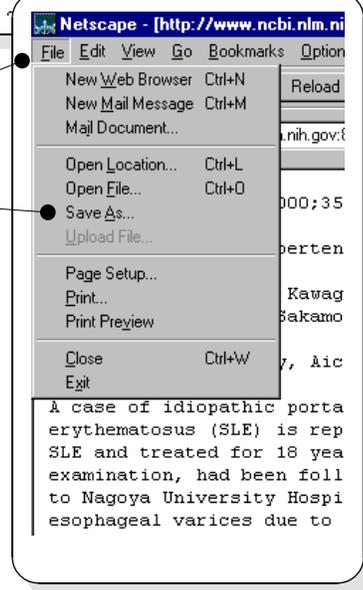
A case of idiopathic portal hypertension (IPH) assoc
erythematosus (SLE) is reported in a 38-year-old man
SLE and treated for 18 years. Esophageal varices. fo
examination, had been followed up for 2 years. On Ju
to Nagoya University Hospital because there was a hi
esophageal varices due to severe thrombocytopenia. A
embolization had temporarily controlled the thromboc
devascularization of

1.9   Saving your data.
In your browser, select the pull-down menu "**File**", and select "**SaveAs**" function. Then, select an appropriate directory and designate the **file name**, using a ".txt" suffix.

Netscape - [http://www.ncbi.nlm.ni
File Edit View Go Bookmarks Option
New Web Browser   Ctrl+N   Reload
New Mail Message   Ctrl+M
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Open Location...   Ctrl+L
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1-DOCTORINTERNET B-Download   Eumitogens
2-FIS-WEBSITE   Berkeley Scientific graphics
3-Ray Leal   Clark/Ezra   Great-Book
4-le&coa   clinic   INVESTIN(
5-MED RES. PROJ CORRESPONDENCE   L-E Book

File name: FileName.txt
Save as type: All Files (*.*)

A case of idiopathic portal hypertension (II
erythematosus (SLE) is reported in a 38-year
SLE and treated for 18 years. Esophageal var

Congratulations!

You have just completed a very sophisticated research procedure for which a professional would have rightfully charged a fair amount of money. In fact, within the constraints of this particular search strategy, there is no expert in the world who could have done a better job because 1) you were in the worlds most advanced scientific database and 2) this is all that could have been done - again, within the particular search strategy.
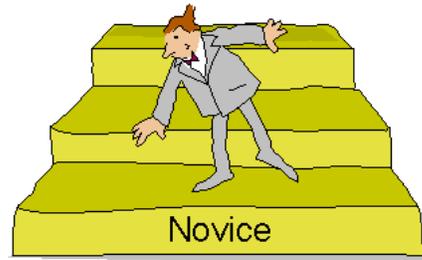
However, you are not an expert yet. Your real work has just begun, and there is much more to learn. Assuming that all of the procedures were performed properly, you have just copied 200 review citations on your subject, and they are stored in a file in one of your directories. From this point, you can "massage" the file according to your routine file-handling procedures. Open your word processor and load the file. There, you can read through the citations, underline areas, edit, and, in general, organize the information as you so desire. For additional information about organizing your retrievals, see the procedures in section: **5 - Making A Research Report**.

1.10   Expert Summary.

Expert Summary

1 - Preliminary survey MEDLINE - "review" citations.

After you have done several searches, the process will become intuitive and, if needed, you can use this outline of basic steps to refresh your memory.

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1 - From browser, log to [**http://www.ncbi.nlm.nih.gov/PubMed**].

2 - Homepage of the **National Library of Medicine / PubMed.**

3 - Type in your search term, select the "**Go**" button.

4 - Select the "**Limits**" link.

5 - Select the   **Publication Types**   menu, select "**Review**", select "**Go**".

6 - In the "**Display**" menu, select "**Abstract**"; and in the "**Show**" menu select 200 or 500.

7 - Select "**Text**" button. Review your retrieval. Save your data to disk, and use your word processor to organize the information.

1.11 Using the DoctorInternet Program.

If you had done this search through the DoctorInternet program, then you would have been using the first routine, "**1 - Preliminary Survey ....**". For the "expert summary", select the icon, "***i***", which will display in frame #2, adjacent. To connect to MEDLINE, use the link "**1**"; and the site will display in frame #3.
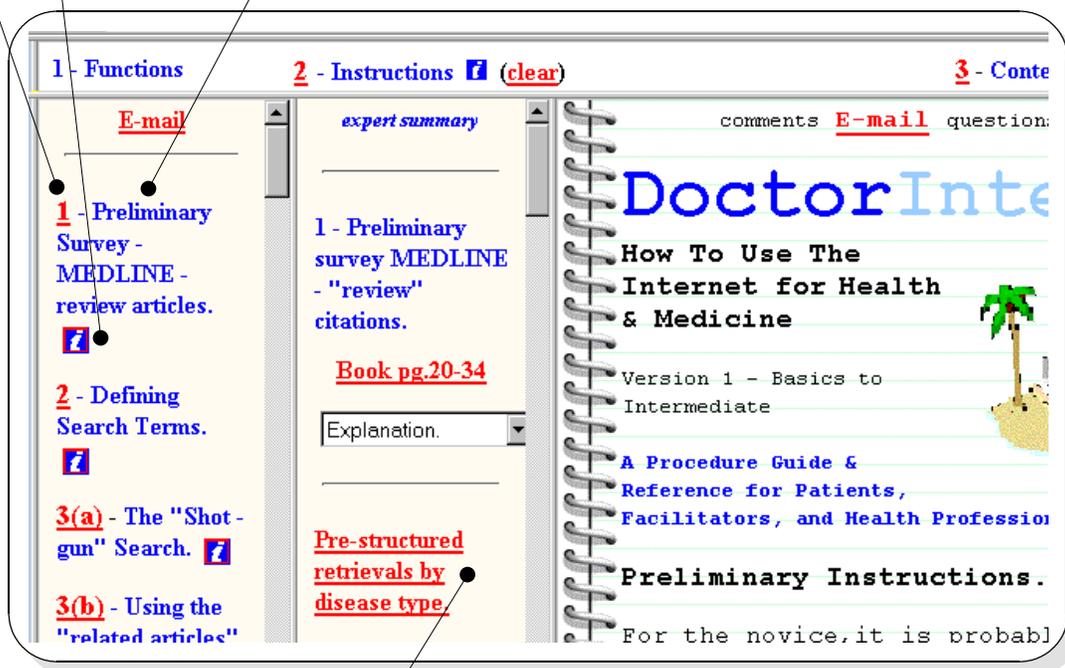
If your are researching review citations on a disease, you may want to expedite the proce-dures by using the "**Pre-structured retrievals by disease type**". This is a complex command that does everything for you, but it only pertains to "review articles" on diseases and not to other bio-medical subjects or categories.