

Chapter 3

Accessing the Biomedical Literature for the Best Evidence



Starting the Search

Introduction to PubMed

Creating and Using a My NCBI Account

Make sure your browser supports Pop-ups and accepts "cookies"

A. Register for a My NCBI Account

- 1 Go to: <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 Click on "Get a My NCBI account" (fig. 1)
- 3 Click on "Register" on the next page
 - Follow the instructions and click "Register" (fig. 2)
- 4 Check your Email for the confirmation
- 5 Follow the instructions on the email
- 6 You can Click the "Keep me signed in unless I sign out" checkbox so you will be indefinitely logged in on your personal computer – *do not* use this option on shared or public computers.

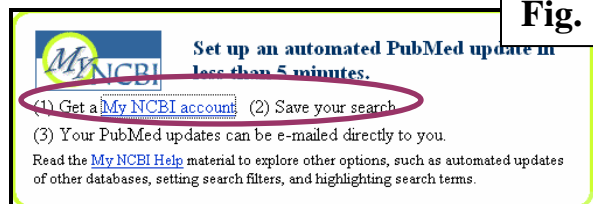


Fig. 1

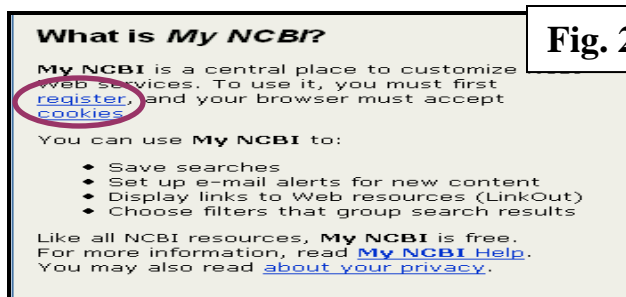


Fig. 2

B. Sign in to My NCBI

- 1 Go to <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 On the top right hand corner, click on "Sign In" (fig. 3)



Fig. 3

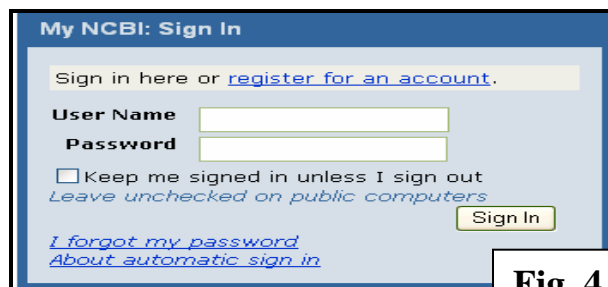


Fig. 4

- 3 Type in your Username and Password (fig. 4)

C. Save a Search to My NCBI and Get Email Updates

- 1 Go to <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 Enter your Search terms in the Search Box (fig. 5)
- 3 After you are done with your search, you will see an option to "Save Search" (fig. 6)
- 4 A Pop-Up Box will appear (fig. 7)
 - Decide if you want to receive email updates
 1. Click Yes if you are in EBP-1
 2. Have emails sent to your NUHS account
 - Press Okay when done



Fig. 5



Fig. 6



Fig. 7

Introduction to PubMed

Performing a Search Using the PubMed Database of Biomedical Literature

A. Starting the Search

- 1 Go to: <http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 Identify the key concepts for your search.
- 3 Enter the terms in the search box. (fig. 1)
 - You can search by keyword, subject, or author
- 4 Click Go.



Fig. 1

B. Searching Techniques

- 1 **Booleans (AND, OR, NOT)** can be used to broaden or narrow your search.
- 2 The **Wildcard (?)** can be used to replace any character.
 - Enter **ne?t** to find results containing **neat, nest or next**.
- 3 **Truncation (*)** will find all forms of a word. Enter **chiro*** to find results containing **chiropractic** and **chiropractor**. Enter **acup*** to find results containing **acupuncture** and **acupressure**.
- 4 Click **Single Citation Matcher** from the sidebar to find citations with a fill-in-the-blank format (fig. 2)
- 5 Click **Clinical Queries** from the sidebar to find Systematic Reviews or Medical Genetics Searches
 - Search by Clinical Study categories (therapy, diagnosis, etiology, etc) for background (broad) or foreground (narrow) clinical questions.
- 6 Click on **Special Queries** from the sidebar to initiate pre-build clinical queries focused on complementary and alternative medicine topics. Scroll down to "CAM on PubMed."

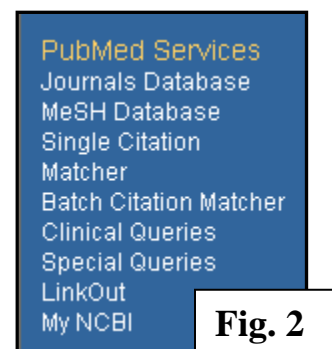


Fig. 2

C. Viewing Results (fig. 2)

- 1 Citations are initially displayed 20 per page with the most recently entered citations displayed first
- 2 You can **Sort by** Publication Date, Author, or Journal
- 3 The **Author** link takes you to the citation information and/or the full text of the abstract. (fig. 3)
- 4 Clicking the **"Related Articles, Links"** link will perform a search for articles with similar subject headings. A new Result List will display. (fig. 4)
- 5 In the **Abstract View**, you can get full-text of an article if you see the following (or similar) link in the top right corner. (fig. 5)
- 6 You can use the **"Send to"** pull-down bar (fig. 3) to send the abstract as an email or to the printer

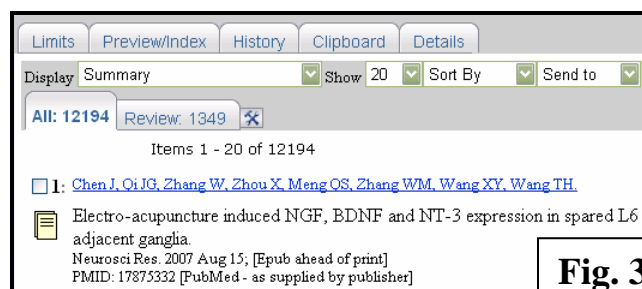


Fig. 3

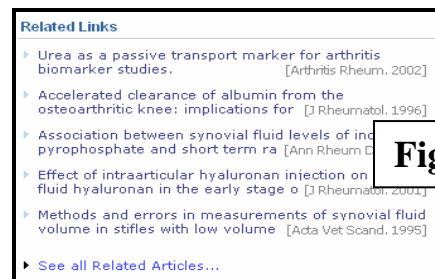


Fig. 4



Fig. 5

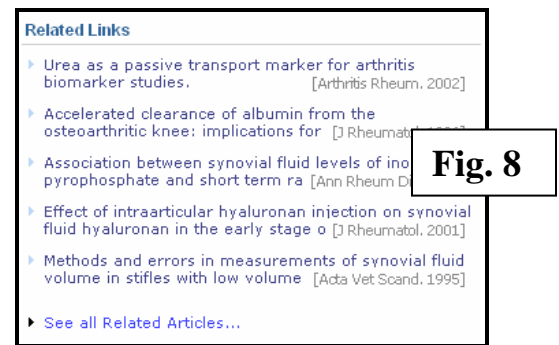
D. Using Limits

- 1 Click on the “Limits” tab below your search query. (fig. 6)
- 2 You can Limit by: (fig. 7)
 - Publication Date
 - Human or Animal Subjects
 - Gender
 - Subsets and Topics (including CAM)
 - Language
 - Study Design
 - Subject Age
 - Type of Article



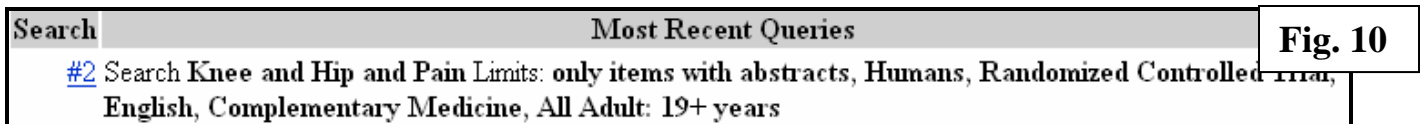
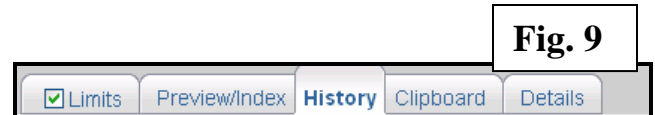
E. Expanding Results

- 1 Clicking the “**Related Articles, Links**” link will perform a search for articles with similar subject headings. A new Result List will display. (fig. 8)
- 2 Remove too broad or too specific terms from the search box to change the results.
- 3 Try using alternative terms to describe the concepts for which you are searching.
- 4 Save your searches using your My NCBI account. When finished, save your best searches and delete those that produced too many or non-relevant results.



F. Copying & Pasting the Query

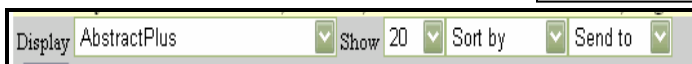
- 1 In PubMed, click on the “History” tab (fig. 9)
- 2 Select the search that you used to locate your articles from the list of searches performed (fig. 10)



- 3 Paste Query into the Search Evaluation Form

G. Emailing the Citation

- 1 Click on the Author link for a selected result to view the abstract.
- 2 In the drop down menu, select the “**Abstract Plus**” view.
- 3 In the Abstract Plus view, click on the “**Send to**” pull down list (fig. 8)
- 4 Select “Email”
- 5 Select “Citation”
- 6 Type in “Team#.Topic.Search1” in the comments box. Add other comments to help you identify the activity, view, results, etc. as you see fit.
- 7 Type in the email addresses that you want to send the citation to, separated by a semi-colon (;)
 - Send the citation to your own email account
 - Send the citation to ebp1@nuhs.edu



Introduction to PubMed

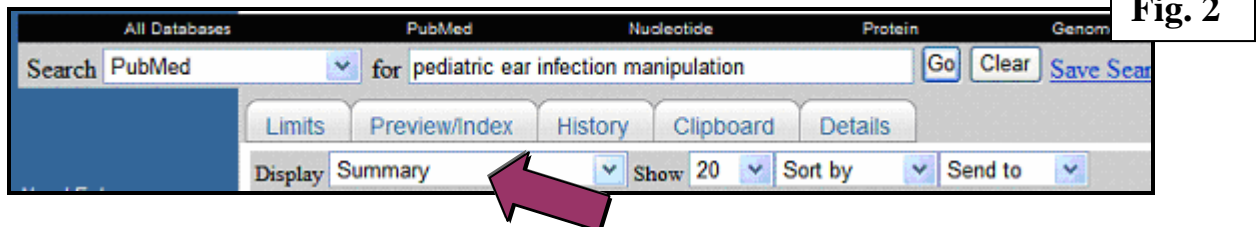
Creating a Single PubMed Citation

1. Perform a simple search on PubMed

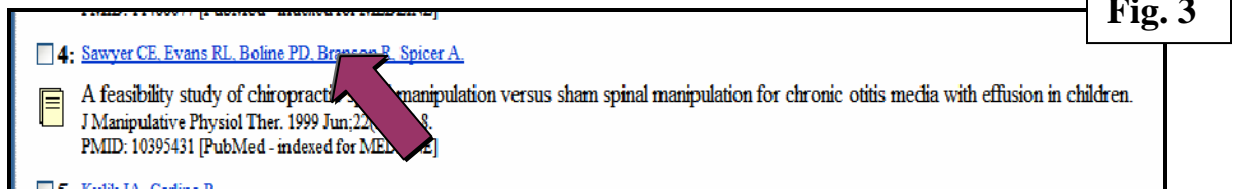
<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?DB=pubmed> (fig. 1)



2. Change the Display to the Summary format using the drop down box. (fig. 2)

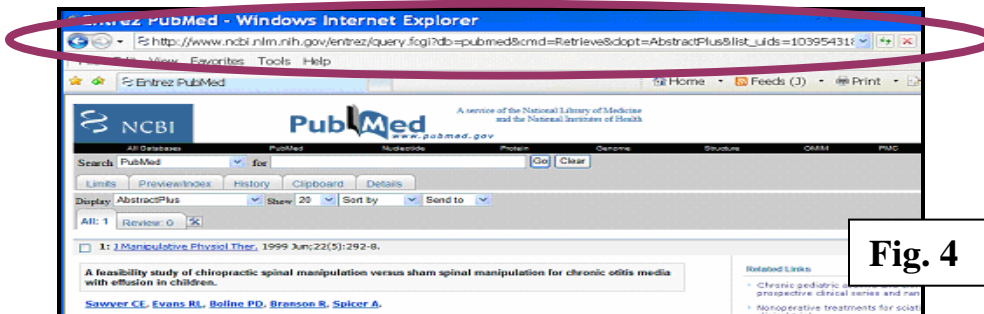


3. Click the **author link** to display the AbstractPlus format (fig. 3)



4. Copy the URL completely from the browser's address bar. (fig. 4)

You may also copy the **article's title**, which contains the permanent URL to the abstract.



5. Paste the URL or the Article's Title into the Search Evaluation Form document. (fig. 5)

http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?db=pubmed&cmd=Retrieve&dopt=AbstractPlus&list_uids=10395431&query_hl=1&itool=pubmed_docsum

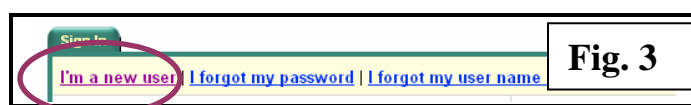
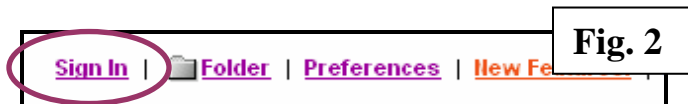
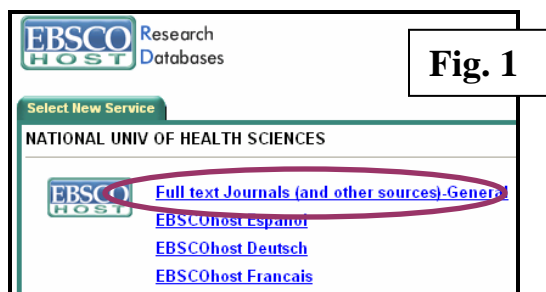
Fig. 5

Introduction to EBSCOhost

Creating and Using a My EBSCOhost Account

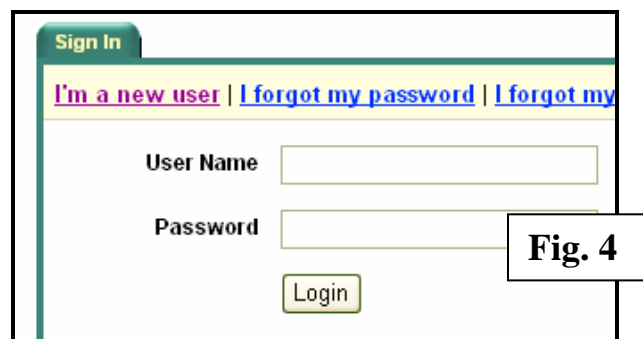
A. Register for a My EBSCOhost Account

- You can Access EBSCO in any of three ways.
 - Go to: <http://search.ebscohost.com/>
 - Use the LRC database page: <http://www.nuhs.edu/show.asp?durki=216>
 - Off Campus: Use the ID and Password List
- Click on “[Full text Journals \(and other sources\)-General](#)” (fig. 1)
- Select any of the databases and click “Continue”
 - Selecting one database allows the use of subject headings, controlled vocabulary – both a benefit to focused search strategies
- Click on “Sign In”, at the top right corner (fig. 2)
- Click on “I’m a New User” on the next page
 - Fill in the information and click “Submit”
 - Please use your NUHS student email account to avoid spam filtering
- Click “Continue” when you see the prompt



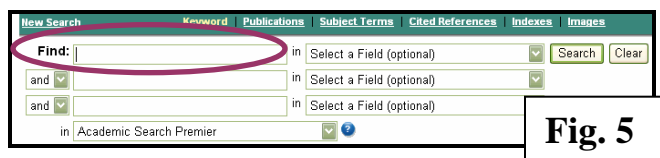
B. Sign in to My EBSCOhost

- Go to <http://search.ebscohost.com/>
- Click on “[Full text Journals \(and other sources\)-General](#)”
- Select any of the databases and click “Continue”
- Click on “Sign In”, at the top right corner
- Type in your Username and Password (fig. 4)



C. Save a Search to EBSCOhost and Get Email Updates

- Go to <http://search.ebscohost.com/>
- Log into you're My EBSCOhost account and select a database
- Enter your Search terms in the Search Box (fig. 5)
- On the Search Results page, click on “Search History/Alerts” (fig. 6)
- Click on “Save Searches/Alerts” (fig. 7)
- Follow the directions and click “Save”
 - Decide if you want to receive email updates
 - If you are in EBPI, Save Search as “Alert” (fig. 8)



Introduction to EBSCOhost

Performing a Search Using EBSCOhost Databases of Biomedical Literature

A. Starting the Search

- 1 Go to: <http://search.ebscohost.com/>
- 2 Click on “[Full text Journals \(and other sources\)-General](#)”
- 3 Select any of the databases and click “Continue”
- 4 Enter your search terms in the **Find** field. (**fig. 1**)
- 5 Click the **Search** button. A Result List is displayed.

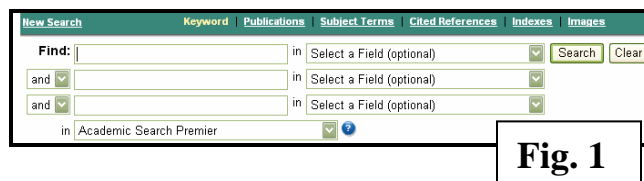


Fig. 1

B. Searching Techniques

- 1 **Booleans (AND, OR, NOT)** can be used to broaden or narrow your search.
- 2 The **Wildcard (?)** can be used to replace any character.
 - Enter **ne?t** to find results containing **neat, nest or next**.
- 3 **Truncation (*)** will find all forms of a word. Enter **chiro*** to find results containing **chiropractic** and **chiropractor**. Enter **acup*** to find results containing **acupuncture** and **acupressure**.
- 4 The **Near (N)** operator will find search terms within **x** words of one another, regardless of order.
 - Enter **chiropractic N5 manipulation** to find results that would match **chiropractic manipulation** as well as **manipulation and chiropractic adjustment**. (Using N5 results in items within 5 words proximity from each other).
- 5 The **Within (W)** operator will find search terms within **x** words of one another, in the order in which you entered them.
 - Enter **chiropractic W8 manipulation** to find results that match **chiropractic manipulation** or **chiropractic manipulation and modalities**, but do not match **manipulation and chiropractic adjustment**. (Using W8 results in items within 8 words proximity from each other, in order).

C. Viewing Results (fig. 2)

- 1 The **Article Title** link takes you to the citation information and/or the full text. (**fig. 2**)
- 2 The **HTML Full Text** link takes you directly to the full text of the article in an “on-line” version.
- 3 The **PDF Full Text** link takes you to a Portable Document Format (PDF) version of the full text. The PDF will open in the Adobe® Reader®.
- 4 Clicking the **Folder** icon to the right of a result saves it to your EBSCOhost account folder.
- 5 When a **Find More Like This** appears, click to perform a search for articles with similar subject headings. A new Result List will display. (**fig. 3**)

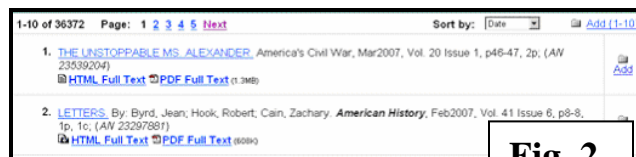


Fig. 2



Fig. 3



Fig. 4

D. Using Limits

- 1 Limits can be set in EBSCOhost in many ways
 - Use the navigation bar at the top of the screen to limit by Publication, **CINAHL Headings**, Cited References, or to search the Index. (fig. 4)
 - Use the “Advanced Search” tab to limit your search further (fig. 5)
 1. Journal Subset (try: **CAM Therapies**)
 2. Special Interest (try: **Chiropractic** or **EBP**)
 3. You can also limit by publication date and/or type, author, peer-viewed, language, age group, and gender.

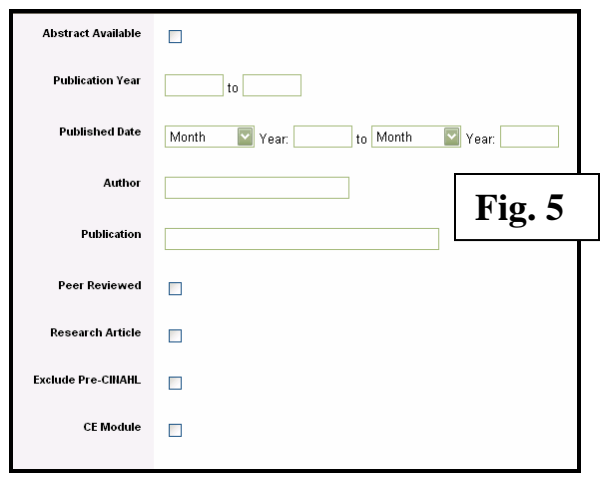


Fig. 5

E. Expanding Results

- 1 When a **Find More Like This** appears on the abstract page, click to perform a search for articles with similar subject headings. A new Result List will display. (fig. 6)
- 2 You can narrow or broaden your results by clicking on any of the subject headings listed in the yellow **Thesaurus Box** to the left of your search results. (fig. 7)
- 3 Clicking on “**Search History/Alerts**” will allow you to see and combine past searches to find new results. (fig. 8)



Fig. 6



Fig. 8

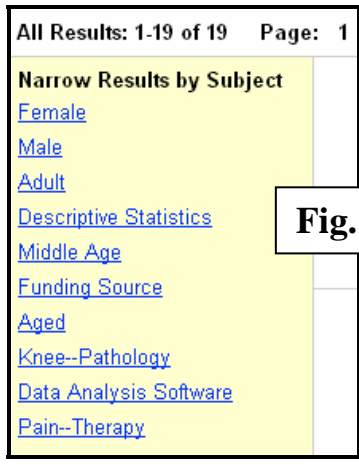


Fig. 7

F. Copying & Pasting the Query

- 1 At the Top of the results page, locate the query after “Results For:” (fig. 9)
- 2 Copy and Paste this into the Advanced Search Form



Fig. 9

G. Emailing the Citation

- 1 In the Abstract View, Click on “Email” (fig. 10)
- 2 Select “Citation Format” and “Vancouver/ICMJE” (fig. 11)
- 3 Type in the email addresses that you want to send the citation to, separated by a semi-colon (;)
 - Send the citation to your own email account
 - Send the citation to ebp1@nuhs.edu



Fig. 10

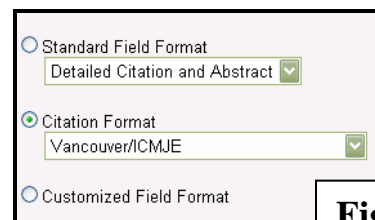


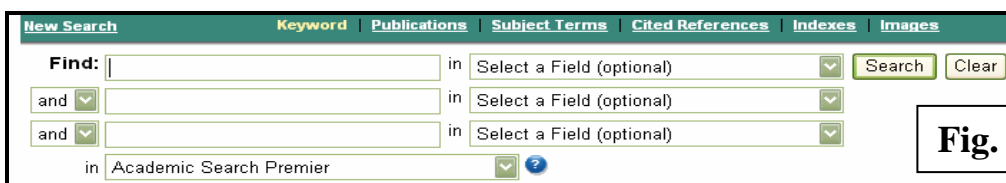
Fig. 11

Introduction to EBSCOhost

Creating a link to an EBSCOhost citation

1. Perform a basic search on EBSCOhost

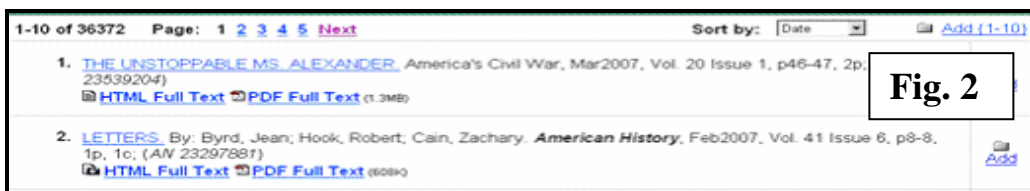
<http://search.ebscohost.com/> (fig. 1)



The screenshot shows the EBSCOhost search interface. At the top, there are tabs for "New Search", "Keyword", "Publications", "Subject Terms", "Cited References", "Indexes", and "Images". Below the tabs, there is a search form with three rows. Each row has a "Find:" label, a text input field, an "in" label, a dropdown menu labeled "Select a Field (optional)", a "Search" button, and a "Clear" button. The first row is highlighted. Below the search form, there is a label "in Academic Search Premier" and a dropdown menu.

Fig. 1

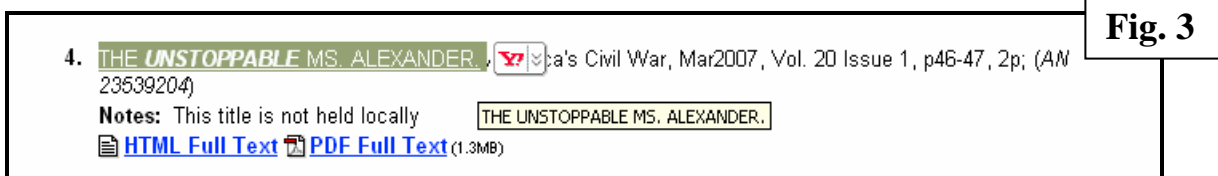
2. On the Results Page, find an article you like (fig. 2)



The screenshot shows the EBSCOhost results page. At the top, there is a navigation bar with "1-10 of 36372", "Page: 1 2 3 4 5 Next", and "Sort by: Date". Below the navigation bar, there is a list of search results. The first result is "1. THE UNSTOPPABLE MS. ALEXANDER. America's Civil War, Mar2007, Vol. 20 Issue 1, p46-47, 2p. (AN 23539204)". Below the title, there are links for "HTML Full Text" and "PDF Full Text (1.3MB)". The second result is "2. LETTERS. By: Byrd, Jean; Hook, Robert; Cain, Zachary. American History, Feb2007, Vol. 41 Issue 6, p8-8, 1p, 1c; (AN 23297887)". Below the title, there are links for "HTML Full Text" and "PDF Full Text (608k)".

Fig. 2

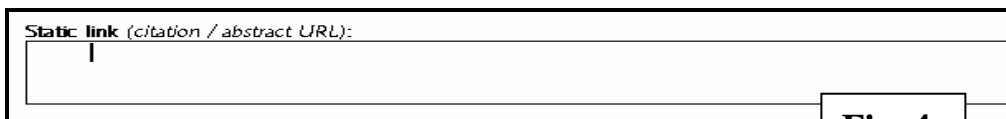
3. Select the title link by highlighting with your cursor (fig. 3)



The screenshot shows the EBSCOhost results page. The title "THE UNSTOPPABLE MS. ALEXANDER." is highlighted with a mouse cursor. Below the title, there is a note: "Notes: This title is not held locally". Below the note, there are links for "HTML Full Text" and "PDF Full Text (1.3MB)".

Fig. 3

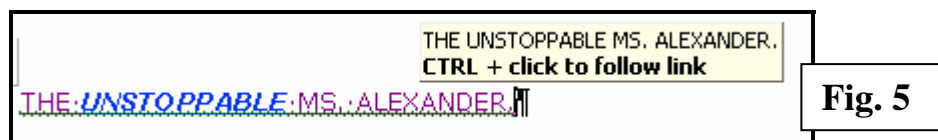
4. Copy and Paste the complete title into the Search Evaluation Form (fig. 4)



The screenshot shows the Search Evaluation Form. The "Static link (citation / abstract URL):" field is highlighted, and the title "THE UNSTOPPABLE MS. ALEXANDER." is pasted into the field.

Fig. 4

5. In the Word Document, Ctrl + Click on the link to open it in Internet Explorer. (fig. 5)

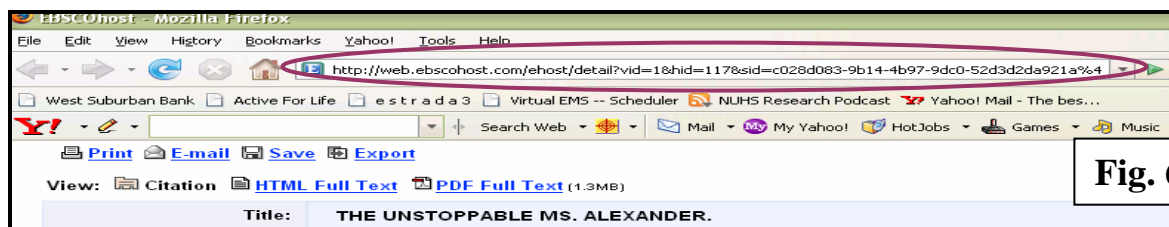


The screenshot shows a Word document. The title "THE UNSTOPPABLE MS. ALEXANDER." is highlighted. A callout box with a yellow background and black text says "THE UNSTOPPABLE MS. ALEXANDER. CTRL + click to follow link".

Fig. 5

6. In most browsers, you can Copy and Paste the URL in the Internet Explorer when the Abstract comes up, and then Paste back into the word file (fig. 6)

If you have Vista, stop at Step 5 to make sure that the link works to take you to the abstract.



The screenshot shows a Mozilla Firefox browser window. The address bar contains the URL "http://web.ebscohost.com/ehost/detail?vid=1&hid=117&sid=c028d083-9b14-4b97-9dc0-52d3d2da921a%4". Below the address bar, there are links for "Print", "E-mail", "Save", and "Export". Below the links, there is a "View:" label and a dropdown menu showing "Citation", "HTML Full Text", and "PDF Full Text (1.3MB)". Below the dropdown menu, there is a "Title:" label and the text "THE UNSTOPPABLE MS. ALEXANDER."

Fig. 6

Introduction to PubMed

Determining the Quality and Relevance of an Article

A. Performing the Search

- 1 Go to:
<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 Identify the key concepts (terms) for your search from your PICO question.
- 3 Enter the terms in the search box. (fig. 1)
- 4 Click Go.



Fig. 1

B. Checking the Authors

- 1 In the Abstract View, Click on any of the author names (fig. 2)
- 2 This will open up a list of all of the titles that the author has published.

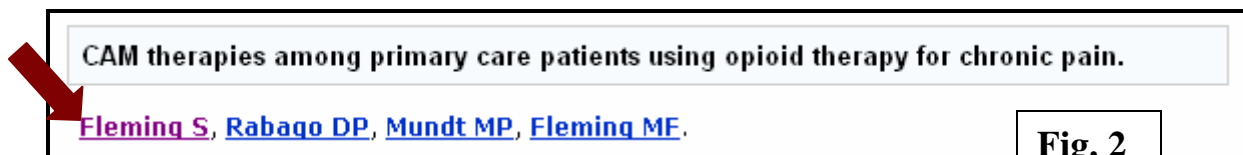


Fig. 2

C. Checking the Journal

- 1 MEDLINE journals are peer-reviewed
 - Click on the journal link from the abstract view to see if journal is indexed in MEDLINE (fig. 2)

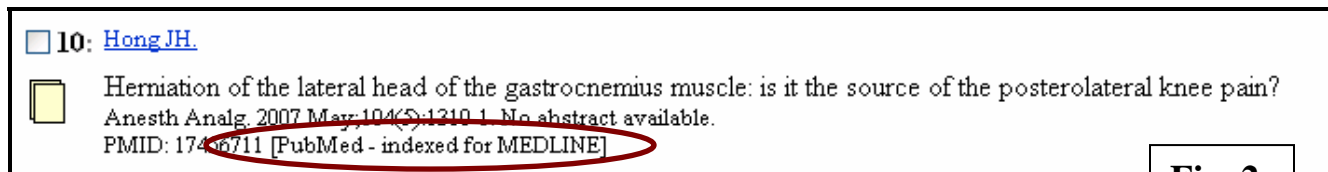


Fig. 2

- 2 But, not all peer-reviewed journals are indexed in MEDLINE
 - Click on journal link to go to journal website; check “about us” or similar – look for “peer-reviewed”, editorial board, or similar

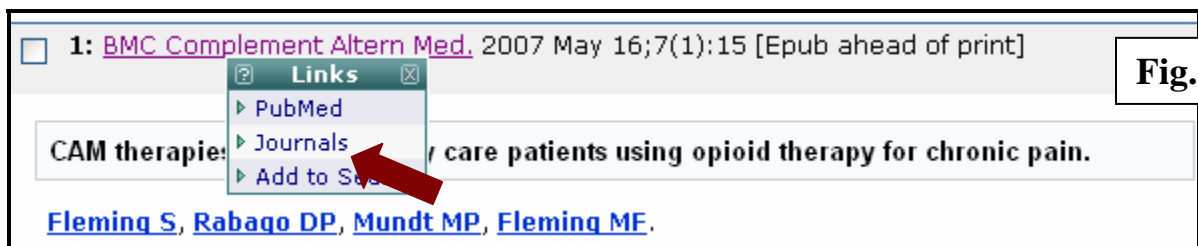


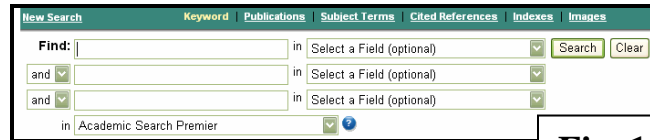
Fig. 3

Introduction to EBSCOhost

Determine the Quality and Relevance of an Article

A. Performing the Search

- 1 Go to:
<http://www.ncbi.nlm.nih.gov/entrez/query.fcgi>
- 2 Identify the key concepts (terms) for your search from your PICO question.
- 3 Enter the terms in the search box. (fig. 1)
- 4 Click Go.



The screenshot shows the EBSCOhost search interface. At the top, there are navigation tabs: "New Search", "Keyword", "Publications", "Subject Terms", "Cited References", "Indexes", and "Images". Below the tabs is a search box with the label "Find:" and a "Search" button. There are also "and" and "or" dropdown menus for combining search terms. At the bottom, it says "in Academic Search Premier".

Fig. 1

B. Checking the Authors

- 1 In the Abstract View, you can see the authors' affiliations
- 2 Click on any of the author names to open up a list of all of the titles that the author has published. (fig. 2)

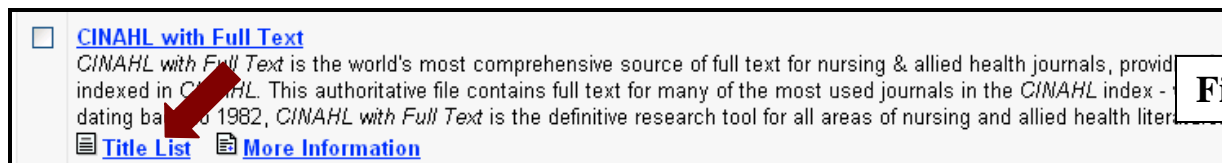


The screenshot shows an author's profile page. The "Title:" field contains "Anthropometric risk factors for patellar tendon injury among volleyball players." The "Author(s):" field contains "Malliaras P; Cook JL; Kent PM". The "Affiliation:" field contains "Brunel University, West London, UK. peter.malliaras@brunel.ac.uk". A red arrow points to the author names.

Fig. 2

C. After Performing your Search – Check the Journal

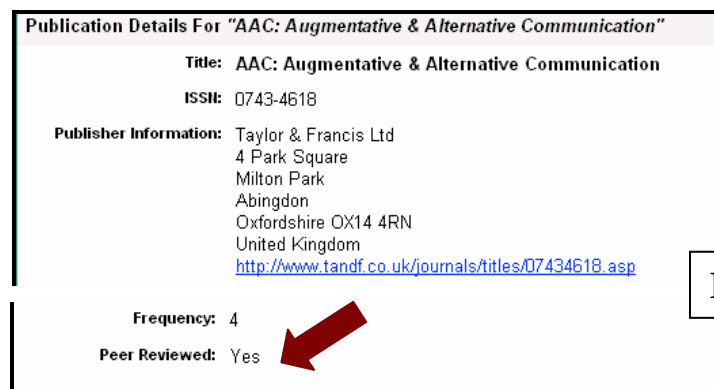
- 1 Most EBSCOhost databases list journal titles link on “Select Database” page (fig. 3)



The screenshot shows the "CINAHL with Full Text" database selection page. It includes a checkbox, the title "CINAHL with Full Text", and a description: "CINAHL with Full Text is the world's most comprehensive source of full text for nursing & allied health journals, provided in full text in CINAHL. This authoritative file contains full text for many of the most used journals in the CINAHL index - dating back to 1982, CINAHL with Full Text is the definitive research tool for all areas of nursing and allied health literature." There are links for "Title List" and "More Information". A red arrow points to the "Title List" link.

Fig. 3

- 2 Click “titles” >> click specific journal >> look for info (fig. 4)
 - CINAHL contains a list of peer-reviewed journals



The screenshot shows the "Publication Details For 'AAC: Augmentative & Alternative Communication'". The title is "AAC: Augmentative & Alternative Communication". The ISSN is "0743-4618". The publisher information is "Taylor & Francis Ltd, 4 Park Square, Milton Park, Abingdon, Oxfordshire OX14 4RN, United Kingdom, <http://www.tandf.co.uk/journals/titles/07434618.asp>". The frequency is "4" and the peer reviewed status is "Yes". A red arrow points to the "Peer Reviewed: Yes" text.

Fig. 4