SciFinder Searching from CAS staff

Tips for Specifying a Research Topic

To find information while exploring or refining by research topic, enter your phrases in English using natural language. SciFinder understands which terms are the keywords and how to relate the terms to one another.

Restrictions

- Up to 40 words can be used to define the research topic.
- Up to seven concepts can be used to define the research topic.
- Up to eight terms can be used to define a single concept.
- Up to three Boolean operators can be used to define a single concept.

Defining Your Research Topic

Search results are enhanced if you use two or three concepts combined with prepositions, conjunctions, and other simple parts of speech.

Examples:
- effect of penicillin on milk production in dairy cows
- liver apoptosis and nasal apoptosis

Prepositions

Examples of common prepositions are: after, among, at, between, from, in, into, on, upon, within.

There is a difference in meaning between the two phrases:
- reactions caused by heat
- reactions causing heat

Although SciFinder does not understand the relationships implied by prepositions, it does recognize prepositions and uses that information to fulfill your information request.
Use of AND and OR

Sometimes, SciFinder cannot discern the differences in the words AND and OR. In these cases, SciFinder runs the search using AND and OR and presents both results for your selection.

- Do not use the word AND if a preposition would be more exact.
  
  **Instead of:** human growth hormone and fetal development
  
  **Use:** effects of human growth hormone on fetal development

- Do not use AND when you really mean OR. Use OR to signify either term or both terms. Use AND to signify both terms only.

  **Example:** interface software for bibliographic information AND numeric data
  
  **Meaning:** You want a single piece of software to interface with bibliographic information and numeric data.

  **Example:** interface software for bibliographic information OR numeric data
  
  **Meaning:** You want a single piece of software to interface with bibliographic information or numeric data.

Distributed Modifiers

Although it is natural to say, "I am interested in liver or nasal apoptosis," SciFinder does not recognize distributed modifiers. You must describe the topic to SciFinder as, "liver apoptosis or nasal apoptosis."

Negation

You may describe a research topic using negative terms such as NOT or EXCEPT (in either upper- or lowercase).

  **Example:** ringed planets but NOT Saturn
Abbreviations and Misspellings

SciFinder is designed to recognize and accept:

- Commonly used abbreviations, such as BTU and Prep
- Commonly misspelled words (*affect* instead of *effect*)
- Words spelled according to either British or American English (*colour* or *color*)

Synonyms

You may enter synonyms with your research topic. Place synonyms in parentheses next to the topic you entered.

**Example:** milk production of cows (bovines)

**Result:** SciFinder searches for both terms, *cows* and *bovines*.

Truncated Words and Truncating Symbols

SciFinder automatically truncates the terms in your query and searches for plural forms, past tense verbs, and other word forms. Do not include truncation or wildcard symbols (such as ! or *) in your search terms. SciFinder disregards them and interprets the remaining characters literally.

**Example:** effects of age on calcium absorption in women

**Result:** SciFinder automatically expands your query to include terms such as *aged* or *aging.*
More on Prepositions from Auburn University
From: http://libguides.auburn.edu/c.php?g=519007&p=3549825

Prepositions

- Increases the relevance of search results
- Cost you nothing ... and usually finds better search results!
- A preposition is better than the "AND" operator

Compare these three searches in SciFinder:
  - hydrogen storage metal hydrides
  - hydrogen storage with metal hydrides
  - hydrogen storage and metal hydrides

Now compare these two searches in SciFinder:
  - hydrogen storage with metal hydrides with low pressure
  - hydrogen storage with metal hydrides with low pressure (atmospheric pressure)

Can the efficiency of the last search be duplicated using "AND"s? No!!!

Prepositions invoke the "closely associated" operator, which is a powerful tool in SciFinder.