OCULUS

Optometry CUrriculum for Lifelong Learning through ErasmUS

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FINDING EVIDENCE FOR EVIDENCE BASED PRACTICE

Acquiring Evidence

In this lab, you will be using the key words from the question you formulated last week to begin a search for evidence relevant to your question. There are several online databases available to search for research evidence, but as an example we will use Pubmed today http://www.ncbi.nlm.nih.gov/pubmed/

To find Pubmed without the above link, use Google to search for "Pubmed" and the first item that comes up will be the correct link. The Pubmed home page is shown below. The Quick Start Guide will be helpful as you begin to use this database, but we will work through the basics today.

You will need to enter your key words into the search bar at the top of the page, and click Search or press Enter. Pubmed uses the Boolean operators AND, OR and NOT to allow you

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to be more specific in your search terms. In fact, 'AND' is the default case, so Pubmed assumes that you want all of the terms you have entered unless you use a Boolean operator. When you use these operators they are read left to right by Pubmed, so if you search for: pen AND paper OR pencil, Pubmed will find articles that include both terms 'pen' and 'paper' as well items that include only 'pencil'.

As one example, let's say our question is: *What effect does off-axis retinoscopy have on refractive error results?* We can put the key words *effect, off-axis, retinoscopy* and *refractive error* into Pubmed and see what comes up.

To read the Abstract of each of the articles, we need to click on the title – the Abstract will give us an indication of whether the article is directly relevant to our question, and whether we want to obtain the full article. If so, in some cases the article is available in 'open access', which means we can simply download it from here. If not, we need to go to the University library and either obtain the article online or in hard copy.

In your own search, you may find that you get no articles, or only one or two, in which case you will need to broaden your search (e.g. by using a less specific population or outcome). On the other hand, you may find you get a large number of articles (too many for you to appraise) in which case you should narrow the search. For example, you can increase specificity of your terms, or you could narrow your search down to a particular time period (see the left hand bar item 'Publication dates' on the screen shot at the top of this page). If you do get a large number of articles, try narrowing down the type of evidence too,

specifying higher level evidence (e.g. systematic reviews or randomised controlled trials). You can do this using the 'article types' link on the left hand side of the page.

To save relevant articles, click on the box to the left of each then click 'Send to' and choose either 'Clipboard' or 'Email' – either method saves the list of relevant articles for you to retrieve later.