**Evidence Based Searching for FCP IV – January 13, 2014**

Learning Objectives

* Locate the FCP IV LibGuide/Subject Guide
* Name a resource that will assist with prepping for the USMLE
* Select appropriate resources with information on differential diagnosis
* Utilize several databases to locate evidence based diagnostic test information
* List three ways to find higher quality diagnostic information in PubMed
* Use MyNCBI to quickly filter searches (You should have set up your filters before class)

General Resources

* Foundations of Clinical Practice IV Subject Guide (<http://guides.lib.uiowa.edu/fcp4>)
	+ This is a great place to start. The resources have been specially selected for your needs.
		- List of textbooks for FCP IV with links when an electronic version is available
		- Physical Examination – don’t forget about the Simulation Center!
		- USMLE resources
		- Differential Diagnosis
* Evidence Based Practice Subject Guide (<http://guides.lib.uiowa.edu/ebp>)



**Publication Types by Question Type:** Different study types are suited to different questions. For example:

**Most Clinical Questions:** Meta-analyses, systematic reviews

**Diagnosis:**

Prospective, blind controlled trial compared to gold standard (often looking for a cohort)

Test Characteristics

* Sensitivity: Sn(out) – tests with a high sensitivity can be used to rule a disease out.
* Specificity: Sp(in) – tests with a high specificity can be used to rule a disease in.
* Likelihood Ratio – indicates the extent to which a given diagnostic test result will increase or decrease the pretest probability of the target disorder.
	+ LR+ = sensitivity / (1-specificity)
	+ LR- = (1-sensitivity) / specificity
* Pre-test and Post- Test Probability: Pre-test probability is based on your expertise and whether you think a patient has the disease. You use this with your likelihood ratio and the nomogram to determine post-test probability of disease.

Resources to Remember

***Critically-Appraised Topics*** *(Evidence Syntheses):*

* + [DynaMed](http://purl.lib.uiowa.edu/dynamed): provides evidence based summaries with evidence ratings for a wide range of diseases and drugs.
	+ [ACP](http://purl.lib.uiowa.edu/acppier) Smart Medicine: provides evidence based summaries of various diseases, treatments, and procedures. All recommendations receive evidence ratings and are referenced.

Unfiltered Resources [Searching the primary literature] Evidence is not always available via filtered resource, either because the research is too new or the question is very specific. In those cases, you may want to search a database like PubMed.

Below are a few tips to assist you with locating evidence for supporting diagnostic decision making in PubMed.

* + Click on "clinical queries". This specialized search is intended for clinicians and has built-in search "filters."
	+ limit to publication types such as systematic reviews, randomized controlled trials, etc.
	+ Use MeSH – This will give you more focused results. There are even terms for “Differential Diagnosis” and “Prognosis”
	+ Use subheadings – There’s a subheading for “diagnosis” that can be used for just about any disease MeSH term.

Background Information/Expert Opinion (Not evidence based!)

* Books – You can find these using InfoHawk or SmartSearch
* UpToDate – This cannot be a source for your EBM assignments, but it can still be used for background information.

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