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| Information Retrieval |  | Week 2 - Tuesday  **Activity A (de novo)**  **Activity B (concepts)** |
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| Overview Understand the need for and utility of a controlled vocabulary in precise and effective data retrieval Learning Objectives  * Specificity * Sensitivity * Boolean logic * PubMed Tags * Mesh Vocabulary  Activity & Description (a) Have students conceptualize on paper a method for finding a single item or set of items of interest in a large database. Test and refine these methods online in the context of the PubMed database. Report on success of their best effort.  Have student groups search for a generic term like “enhancer” in the context of a specific query like “transcriptional enhancers for liver genes”. Students will propose an efficient way to retrieve the desired type of hit and to enumerate the problems they encountered doing this. Students will also be asked to quantify the specificity of their search (# appropriate hits/20). Activity & Description (b) Instructors will describe and demonstrate the use of Mesh database to explore and select specific refined search terms. Boolean logic terms will be defined and described. Students will apply these approaches to refine the original query (a). Students will quantify the specificity of their improved search. Feedback Groups will present their most efficient query and briefly discuss its limitations. A meta-table will be constructed to enable the class to evaluate the merits of each approach. Discussion Discussion of meta-table will lead to a mini-presentation on PubMed Tags, Boolean Logic and Mesh terms. Students will practice using these strategies in Activity B. | Logistics  |  |  | | --- | --- | | Group Size | 3 | | Group Formulation | Any | | Group Structure | Jigsaw | | Seating/Computers | 1 computer/gp | | Challenge | Single/room | | Presentation | White board |  Student Assessment  |  | | --- | |  |  Workshop Assessment  |  | | --- | |  | |