How To Create a Custom Search of IMPACT

The radiographic side of the IMPACT database is secured to protect the intellectual property rights of the contributors. As such, the SQL context database exists to provide researchers with information about the holdings of the PACS radiographic database. A custom search can be simple (like the Culture, Sex, and Modality examples) or complex (with bracketed sets of Boolean parameters).

On the first page of the IMPACT Custom Reporting tool, you will select the type of mummy (human, animal, related artifact) and cultural group (e.g., Ancient Egypt, Chinchorro) from the pull down menus. Make the date range as broad as possible to find all of the relevant (e.g., human Egyptian) mummies, or narrow it to fit your needs. These basic parameters will be applied to all of the additional search results. Once you have set the Basic Parameters, click the Add Parameter button if you require additional search parameters.
On the next page, you can select the table that contains your parameter of interest, in this case tblModality. If you are searching with more than one additional parameter, you may wish to employ the brackets. Brackets can enclose 2 or more parameters (Do not use on lone parameters) to force the order of operations for the Boolean operators that separate the parameters.

Example:
(Sex = male AND AgeLowerYears > 14) OR (Sex = female AND AgeUpperYears < 14)
This bracketed search will select all of the *males over 14 years old* and all of the *females under 14 years old* that correspond to your Basic Parameters.

Once you have selected your bracket setting and table, click the Continue button.
If you are uncertain what table to search under, click on the green Display Table button at the bottom left. You will be able to select that table and see what it contains.
In this example, we will search for intact mummies (human, Ancient Egyptian, between 1000 BCE and 100 CE with any sort of pathology record in IMPACT. Although strictly necessary for this search, we will open the bracket before the first parameter for the sake of demonstration. Select the Condition table (tblCondition).

Once you have selected your search table, click the Continue button, and select either Condition = intact or ConditionID = 1. Click the Add Parameter button.
With the first parameter selected, you must select a Boolean operator to show how the next parameter will relate to the previous parameter. In this case we will select AND (actually negating the overall need for brackets in this case), and as we are only using two parameters, the open bracket needs to be closed after the second parameter. Select the Pathology table (tblPathology).

Once you have selected the Pathology table, click the Continue button, and select PathologyID > 0 to get any mummies with pathology records. Click Submit.
Once you have clicked Submit, the page will display your search parameters, and prompt you to select a *long form report*, which produces a full report on each mummy, or a *short form report*, which produces a list of the Mummy ID numbers (our master ID number for reference to this and other databases) and IMPACT ID numbers (our ID number for reference to our radiographic holdings). You will also be prompted to provide a filename for the output file. A short form report will be stored as a .CSV file and a long form report will be stored as a series of .XML files (one for each mummy).

With the name of the report entered, click the Create Report button, and it will be downloaded to your computer.
The more specific the table searched in, the more specific the results will be (e.g., tblIMPACTStudies holds data about specific mummy scans, whereas tblModality is a lookup table containing the possible values for modality). While this does not affect the results for some searches (e.g., Sex, Modality), searching using an Anatomical Reference ID for the proximal half of the left femur will produce more relevant (and likely fewer) results if the search is done within the Bone Lesion pathology table (tblBoneLesion) than it will if the search is done within the Anatomical Reference table (tblAnatomicalReference) where it will give results for all references to the proximal half of the left femur (e.g., in Fractures, Object locations, Damage locations, etc.)