

The proposal is to create "categories" on the Simple Search tab, kind of like what they're doing here: <https://pdc.cancer.gov/pdc/browse>.

All filters that are applied should contribute to the search results that are shown, regardless of which category they're in. So the user should be able to say something like, Collection = LIDC-IDRI and Sex = Female and Modality = CT and have all filters applied to the results they see on the right side of the screen. We can leave Text Search as a totally independent thing for now. I don't want to further complicate matters with that.

These are categories of filters I think we should use along with the items that should go in them.

1. General

- a. Collections
- b. Programs (E.g. CPTAC, TCGA – this needs to be added to the database if performance is not sufficient when calling the Wordpress API)
- c. Date Released
- d. 3rd-Party Analysis Results
- e. Exclude collections with commercial use restrictions
- f. Identifiers (New/Modified filter -- rather than just letting people input a list of Subject IDs I'd like this to let users select Subject ID, Study UID, Series UID) and be able to provide a list to retrieve. Also add the option to upload (process it in browser js, not actually upload) a file (CSV, TSV or Excel) rather than pasting into the browser.

2. Subjects

- a. Primary Diagnosis (New filter — this info is not currently in the database so would involve adding a new column and working with others on the TCIA team to build a spreadsheet that provides any available diagnosis data for each subject to load into the database)
- b. Primary Site (New filter — this info is not currently in the database so would involve adding a new column and working with others on the TCIA team to build a spreadsheet that provides any available diagnosis data for each subject to load into the database)
- c. Sex (New filter — this info is already in the database)
- d. Age (New filter — this info is already in the database. Let user set a high and low end slider bar for the age range they want to include.)
- e. Height (New filter — this info is already in the database. Same UI component as Age)

- f. Weight (New filter — this info is already in the database. Same UI component as Age)
 - g. EthnicGroup (New filter — Even if it's often not provided currently, we may as well go ahead and put it in so people don't ask why it's not there and to make it available for the times that it is actually populated. It may also encourage more people to populate that tag.)
 - h. Clinical Time Points
 - i. At least X time point
 - j. Species
 - k. Phantoms
- 3. Images
 - a. Description (New filter — copy the 'Series Description' feature in the QC Tool, but search Study Description, Series Description and ProtocolName fields)
 - b. Image Modality
 - c. Body Part Examined (I'd like to rename this — currently called Anatomical Site)
 - d. Manufacturer (New filter — copy what's in the QC Tool)
 - e. Slice Thickness (New filter — same slider UI component as Age)
 - f. Pixel spacing (New filter — same slider UI component as Age)

Search Results

- Can we merge the two search results tabs so that there are no tabs and it's displaying the 3 pie charts on the "Summary" tab above where the table of search results begins? (just beneath the search result criteria bar)
- For the pie charts, we should be more clear that those are “Subject Counts by Collection”, etc instead of just saying “Counts by Collection”.