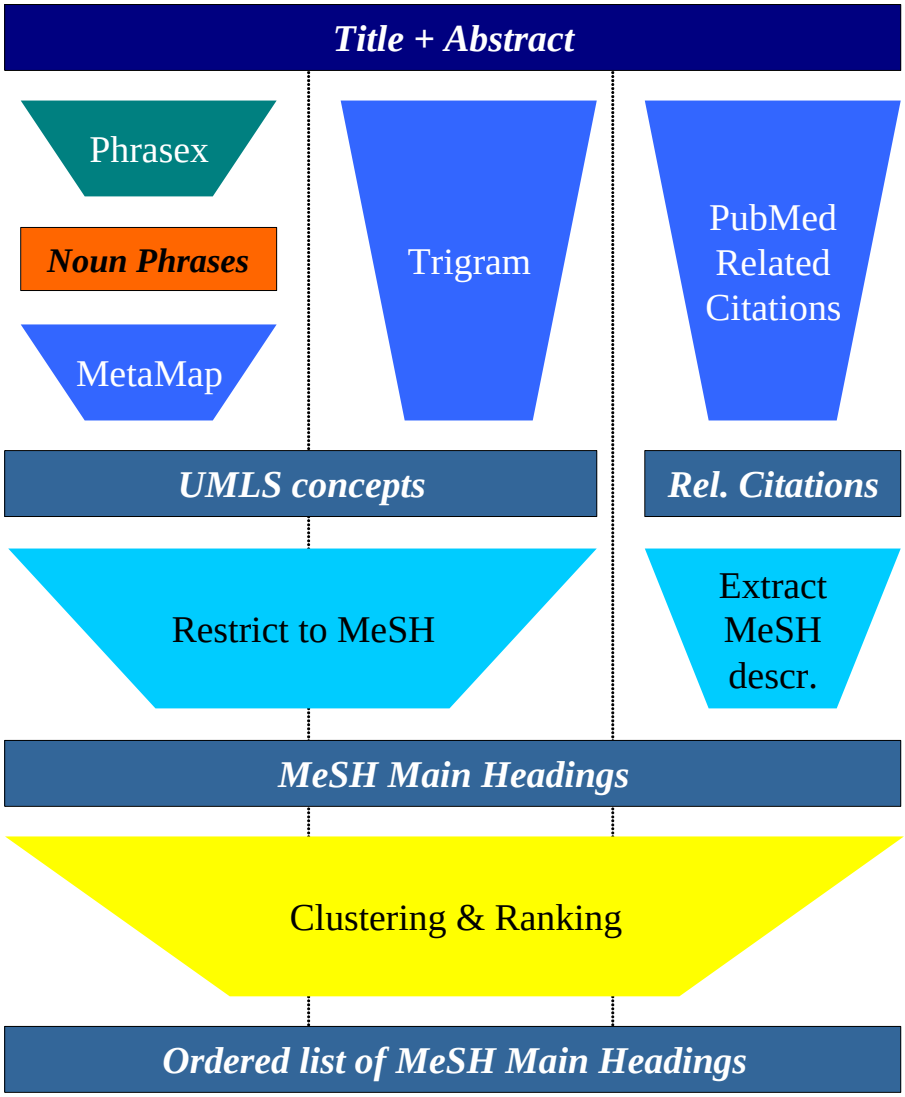
Medical Text Indexer (MTI)



(Last Updated: Monday, March 13, 2006)

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1. Introduction

This document will provide detailed information on all of the processing that takes place behind the scenes in the Medical Text Indexer (MTI). As the diagram below shows, there is a lot going on.

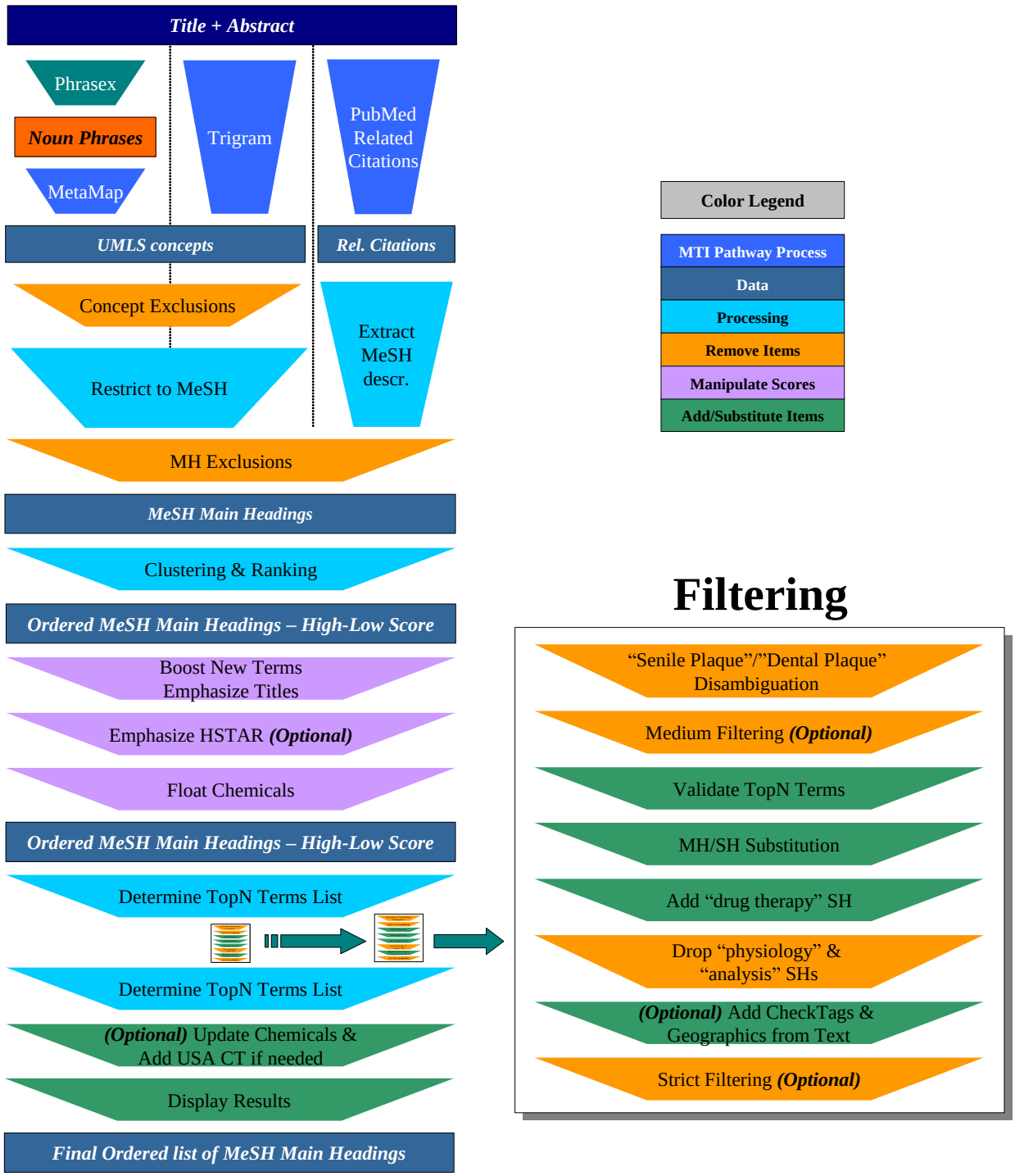

Figure 1: Detailed Medical Text Indexer Process Flow Diagram

2. Exclusions

The following terms are excluded or substituted for even before we get to the Clustering phase of processing in the MTI system.

There is a new option "***noCheckRC***" which allows the user to turn off the checking of **ALL** of these Exclusions from the PubMed Related Citations. This was based on the premise that if a PubMed Related Citation recommended the term, it probably should be there. If the "***noCheckRC***" option is included, only the MetaMap terms are processed through the Exclusions checking.

Regardless of pathway (MetaMap or PubMed) the following MeSH terms are removed:

- TEST
- Comparative Study
- Case Report
- Disease
- [Publication Type]

If the pathway is **Related Citations**, the following special filtering is done to remove a problem in the Medline/PubMed citations where a decision to collapse some MeSH terms came too late for the Year-End Processing at the end of 2005:

- "Influenza A Virus, Human", "Influenza A Virus, Avian", and "Influenza A Virus, Porcine" are all switched to "Influenza A virus".

If the pathway is **MetaMap**:

- the following MeSH term is removed
    - Role
- We remove all terms listed in the CUI_Excludes ***(Appendix-I)*** list. The CUI_Excludes list includes problematic UMLS concepts that come from MetaMap that we don't want to include. These are typically descriptive concepts like "Monitor urine output every hour" and don't help in determining the indexing.
- We remove all terms listed in the BadCTs ***(Appendix-D)*** list. This is a list of CheckTags that shouldn't be indexed by the MTI program like "English Abstract".
- The following special filtering is done to remove particularly problematic examples of ambiguity:
    - "Commonwealth of Independent States" and "Genus Cis" when the trigger is "CI" which generates a variant "CIS" which causes the erroneous inclusion of the concepts.
    - "Greece" when the trigger is "co" which generates a variant "cos" which causes the erroneous inclusion of the concept.
    - "Seals, Earless" when the trigger is "sealed" which is a variant of "seal", but, is related to sealants and not mammals.

- "Bias genus" when the trigger is "biased" which generates a variant "bias" which cause the erroneous inclusion of the concept.
- "INS gene", "Infantile nystagmus syndrome", "Informatics Nurse Specialist", and "French translation of the Medical Subject Headings" when the trigger is "in" which generates a variant "ins" which causes the erroneous inclusion of the concepts.
- "protect" which is a trade name of a product that protects seeds from herbicides. If "protect" or one of its variants is found, we won't use the concept unless we also find "Herbicides" in the results from MetaMap.

If the pathway is **MetaMap ONLY**, the following MeSH term replacements are done:

- Men is replaced by CheckTag Male and CheckTag Humans
- Women is replaced by CheckTag Female and CheckTag Humans
- Patients is replaced by CheckTag Humans

If the ***remMHs*** option is set:

- Remove MeSH Headings found in the MH Exclusion ***(Appendix-H)*** list regardless of path with the following caveat:
  - If the matching MeSH Heading is marked as a "**Special**" term in the MH Exclusion list then we have to verify if it came from the Title in the citation. If the MeSH Heading was triggered by a **perfect matching term** in the citation's Title field, we will **not exclude** the MeSH Heading. This caveat is only applied to MeSH Headings that have come from MetaMap since that is the only path that provides Title/Abstract location information.

We also ignore the following list of titles when they are the only contents of the input item. These are common title only citations that regularly occur in some of our processing and we know that they will generate no reasonable indexing recommendations. So, whenever these occur, MTI returns an empty result without processing any further.

- "TI - [In Process Citation]"
- "TI - Invited commentary."
- "TI - Editorial comment."
- "TI - Fyi."
- "TI - NewsCAP."
- "TI - OlaDance."
- "TI - Systembiology."

3. Clustering and Ranking

The MeSH® headings produced by all of the Indexing Initiative (II) methods are clustered and then formed into a single, final list of recommended indexing terms. This document discusses the steps involved in this clustering and ranking process. A high level view of the steps involved in the processing is as follows:

1. Load and summarize individual path results calculating the term weights (see the section entitled "*Calculating Term Weights*"),
2. Clustering of the results – determining which of the results are related (see the section entitled "*Clustering*"), and finally
3. Ranking the results – using the information obtained in 1 and 2 to compute the rank of each item (see the section entitled "*Ranking*").

Each of these steps will be reviewed in detail over the following sections of this document. But first we provide the reader with some background on where the underlying data used in the processing comes from in the next two sections.

3.1. Overview of Clustering and Ranking (from BoSC99 report)

The task here is to provide a weighting of the confidence or strength of belief in the assignment, and rank the suggested headings appropriately. There are a number of factors that can be recognized as playing a role in that confidence. The method of finding the heading (the path), how much confidence is available in how the method found the heading (the goodness of the match), the location in the text of the nominal phrase that led to that suggestion (the location), and the semantic consistency of the suggested heading with the other suggested headings (the corroborating evidence).

Assigning a weight to the overall method of finding the heading (the *PathWeight*) allows one to discount a method appropriate to strengths. For example, a certain path might not be very specific, but have some sensitivity in suggesting headings that would otherwise not occur. When headings found by other paths offer corroborative evidence for a heading suggested by this method, the additional confidence gained might be helpful.

The goodness of the match, i.e., how much confidence to place in a given heading, depends on the method used to find the heading. The possibilities are:

- A phrase identified in text is an exact match to a MeSH term. Equivalently, it might have been a match to a UMLS® term that was a synonym of a MeSH term.
- Of lesser significance is an exact match to a UMLS term that is then be mapped to a MeSH heading using the Restrict to MeSH method.
- Another possibility is that the phrase is an inexact, or approximate, match to a UMLS term, which is either a synonym of a MeSH heading or mapped to MeSH.

Thus, each time a MeSH heading is suggested, a weighting can be given to that suggestion. This is accomplished using both a *MapScore* and a *NavScore*. The MapScore reflects the confidence in the mapping to a UMLS term, the NavScore the confidence in navigating from a UMLS term to a MeSH Heading.

With regard to the importance of location, the main consideration was whether or not the phrase leading to a heading suggestion was mentioned in the title. All other things being equal, indexers know that things mentioned in the title of the article are probably more important than other concepts mentioned in the article. Similarly, if the heading was suggested by a phrase occurring in the title, it should be given more weight. The additional weight is added as a constant in the formula.
Semantic consistency can be thought of as corroborative evidence for the goodness of a suggestion. It is identified by relationships that a suggested heading has with other suggested headings. These relationships might be either the occurrence in the same hierarchy (as parents or siblings), or as known co-occurring headings in MEDLINE. This latter evidence needs to be weighted according to a normalized frequency of this co-occurrence. The normalized frequency times a constant becomes the COT weight. The former evidence is the REL weight, and is a simple constant.

The overall RankScore can be altered by changing any of the constants (COT, REL, and PathWeight) or by changing the method by which the weight is calculated (NavScore and MapScore). Altering these values allows a number of experiments to be performed to evaluate the robustness of the weighting scheme, and to establish reasonable values for the constants.

3.2. UMLS® Metathesaurus® Files

There are two main UMLS Metathesaurus files used by the clustering and ranking functions, the MRREL and MRCOC files. The following definitions come directly from the UMLS Metathesaurus documentation. The MRCOC file is used to create the normalized frequency database table that the Indexing Initiative uses.

3.2.1. Related Concepts (File = MRREL)

There is one row in this table for each relationship between Metathesaurus concepts known to the Metathesaurus, with the following exceptions found in other files: co-occurrences found in MRCOC; Locator information in MRLO; and Associated Expressions found in MRATX.

Note that for asymmetrical relationships there is one row for each direction of the relationship. Note also the direction of REL - the relationship that the SECOND concept (with Concept Unique Identifier CUI2) HAS TO the FIRST concept (with Concept Unique Identifier CUI1).

RELs may be derived from a source vocabulary's explicit hierarchy (see also MRCXT), derived from other relationships in a source vocabulary, created from information about

allowed qualifiers in a source vocabulary, found in Metathesaurus QA of lexical and semantic matches, or added by Metathesaurus editors.

Where relationships are asymmetrical, there are separate RELS for each direction of the relationship, e.g., one entry for "Atrial Fibrillation" as a child of "Arrhythmia" and another entry for "Arrhythmia" as a parent of "Atrial Fibrillation".

Valid Values for REL:

RB	has a broader relationship
RN	has a narrower relationship
RO	has relationship other than synonymous, narrower, or broader
RL	the relationship is similar or "alike". Some concepts linked by the RL relationship may be determined to be synonyms in future editions of the Metathesaurus. In the current edition of the Metathesaurus, most RL relationships link MeSH supplementary concepts, which have not yet been edited in the new MeSH concept-oriented system. In future editions of the Metathesaurus, this Relation will also be used for "quasisynonyms", such as "Hypertension" and "High Blood Pressure", which are sometimes used synonymously, but have distinct meanings in some circumstances. When RL is used for quasisynonyms, the RELA (Relationship Attribute) will further identify the "quasisynonymous" Relationship.
PAR	has parent relationship in a Metathesaurus source vocabulary
CHD	has child relationship in a Metathesaurus source vocabulary
SIB	has sibling relationship in a Metathesaurus source vocabulary.
AQ	is an allowed qualifier for the first concept in a Metathesaurus source vocabulary.

3.2.2. Co-occurring Concepts (File = MRCOC)

There are two rows in this table for each pair of concepts that co-occur in each information source represented one for each direction of the relationship. (Note that the COA data may be different for each direction of the relationship). Many Metathesaurus concepts have no entries in this file. Due to the very large number of co-occurrence relationships, they are distributed in a separate file.

Co-occurrences are concepts that occur together in the same "entries" in some information source. The relationships represented here are obtained from machine-manipulation of the information source. Co-occurrence relationships may exist between similar concepts (e.g., "Atrial Fibrillation" and "Arrhythmia") or between very different concepts that nevertheless have some important connection in the field of biomedicine (e.g., "Atrial Fibrillation" and "Digoxin"), or between a primary concept and a qualifier e.g., "Lithotripsy" and "instrumentation". A co-occurrence relationship can exist between two concepts that have no other apparent relationship, although the frequency of such co-occurrences will be small.

In the current Metathesaurus, there are three sources of co-occurrence data: MEDLINE, AI/RHEUM, and CCPSS. From MEDLINE, co-occurrence data was computed for concepts that were designated as principal or main points in the same journal article i.e., the co-occurrence counts do not include articles in which either or both of the concepts were present and indexed in MEDLINE but not designated as main points. (A concept is considered to be a main point if the * is attached to the main heading or any of its subheadings.)

3.3. Creating the Normalized Frequency Scores for the Co-Occurring Concepts

This section of the document discusses how we create the co-occurring concepts normalized frequency database used in the Indexing Initiative's Medical Text Indexer (MTI). These steps are done once at the beginning of each year with the final released version of the UMLS Metathesaurus, specifically the MRCOC table.

3.3.1. Overview

The following steps calculate the normalized frequency score for the co-occurring concepts:

1. Summarize all of the records we have by combining identical pairings of CUI1 and CUI2 frequency counts,
2. Determine an overall total of frequency counts for each CUI1 we have, and
3. Finally, divide the frequency counts for each of the records (now summarized) by the total number of frequency counts for the CUI1 that the record is associated with.

3.3.2. Detailed Explanation and Example

1. We pull all records from the MRCOC file except ones containing "|LQ|" in the Type of Co-Occurrence (COT) field. The "LQ" (MeSH topical qualifier) records are only relevant if we want to augment our SubHeading recommendations. We only keep fields 1, 2, and 5 -- CUI1, CUI2, and COF (Frequency of Co-Occurrence) respectively in a bar separated list.

   We end up with a file containing lines similar to the sample below:

```
C0000039|C0000300|2
C0000039|C0001006|1
C0000039|C0001128|1
C0000039|C0001392|1
C0000039|C0001480|1
C0000039|C0001480|1
…
```

2. We than summarize this list by CUI1 by summing the COF for each CUI1 and CUI2 combination and providing a total frequency count for each CUI1 and CUI2 pairing. In the example in #1 above, we would combine the last two rows because the CUI1 and CUI2 pairings are identical. We end up with a file containing lines similar to the sample below:

```
C0000039|C0000300|2
C0000039|C0001006|1
C0000039|C0001128|1
C0000039|C0001392|1
C0000039|C0001480|2
…
```

3. We create a temporary file containing a single line for each unique CUI1 concept. This line contains the total frequency count for that particular CUI1. We end up with a file containing lines similar to the sample below:

```
C0000039|1190
…
```

4. We now combine the two files from #2 and #3. We want to end up with a file containing all of the records of #2 above and the total frequency count from #3 above appended to the end of the line. We end up with a file containing lines similar to the sample below:

```
C0000039|C0000300|2|1190
C0000039|C0001006|1|1190
C0000039|C0001128|1|1190
C0000039|C0001392|1|1190
C0000039|C0001480|2|1190
…
```

5. We now calculate the normalization of the frequency counts for each of the records by dividing the individual record's frequency count (field 3) by the CUI1's total frequency count (field 4). We end up with a file containing lines similar to the sample below:

```
C0000039|C0000300|0.001681
C0000039|C0001006|0.000840
C0000039|C0001128|0.000840
C0000039|C0001392|0.000840
C0000039|C0001480|0.001681
…
```

3.4. Calculating TermWeight

The TermWeight for each MeSH Heading is the summation of all entries for a MH from each of the various paths used (MetaMap after Restrict to MeSH (MMI) and PubMed Related Citations (RC)). The TermWeight for each MH regardless of path is calculated using the following formula where *i* represents the single occurrence of the suggestion of one MeSH heading:

$$TermWeight = TW = \sum_{i=1}^{n} (PathWeight_i * MapScore_i * NavScore_i)$$

Equation 1 - TermWeight Formula

Assigning a weight to the overall method of finding the heading (*PathWeight*) allows one to discount a method appropriate to strengths. The *MapScore* reflects the confidence in the mapping to an UMLS term by a specific method, the *NavScore* is the confidence in navigating from an UMLS term to a MeSH heading.

3.4.1. Tunable and System Parameters

The following table depicts the parameters used in calculating the TermWeight along with their default values:

Abbreviation	Full Name	Tunable by User	Default Value
MMI	MetaMap Indexing Path Weight (*PathWeight*)	X	7
RC	Related Citations Path Weight (*PathWeight*)	X	2
I	Direct Match Navigational String – MMI (*NavScore*)	X	1.00
A	ATX (Associated Expression) Navigational String – MMI (*NavScore*)	X	1.00
G/P	Parent/Broader Navigational String – MMI (*NavScore*)	X	0.90
G/C	Child/Narrower Navigational String – MMI (*NavScore*)	X	0.75
G/S	Sibling Navigational String – MMI (*NavScore*)	X	0.70
O	Other Related Navigational String – MMI (*NavScore*)	X	0.50
IM	MeSH Major Topic Navigational String – RC (*NavScore*)	X	1.00
NIM	MeSH Heading Navigational String – RC (*NavScore*)	X	0.80
Best possible score for items returned by the MMI path (*MapScore*)		-	1,000
Best possible score for items returned by the RC path (*MapScore*)		-	255
Best possible score for items returned by the Trigram path (*MapScore*)		-	1,000

3.4.2. Steps Followed in Calculating the TermWeight

The following steps are done for each MeSH Heading:

1. The weight from the item is provided by each of the individual paths along with the navigational string information. The following example shows items returned for the concept "Blood Flow Velocity" via both the MMI and RC pathways. The individual MapScores are highlighted in **blue** and the individual navigation strings are highlighted in **tan**.

```
❶ MMI: 97479605|C0005798|118|G/P|Blood Flow Velocity|MH||TI|
❷ MMI: 97479605|C0005798|118|O|Blood Flow Velocity|MH||TI|
❸ RC: 97479605|C0005798|28.1847|NIM|Blood Flow Velocity|MH|3|
❹ RC: 97479605|C0005798|26.4019|NIM|Blood Flow Velocity|MH|8|
❺ RC: 97479605|C0005798|26.0665|NIM|Blood Flow Velocity|MH|10|
```

   In the first line we have an item coming from the MMI pathway with a MapScore of 118 out of a possible 1,000 perfect score and having a navigational string of G/P (Parent/Broader).

   In the third line we have an item coming from the RC pathway with a MapScore of 28.1847 out of a possible 255 perfect score and having a navigational string of NIM (MeSH Heading).

2. The items are loaded into the program systematically, so we will always load all of the MMI terms before loading all of the RC terms. To calculate the PathWeight to be used in the calculations for each item, we divide the individual path weight by the path-scoring factor. The path-scoring factor is used to equalize all of the different scoring methods. If the path is MMI or Trigram, we use 1,000 and for RC, we use 255.

```
MMI PathWeight = 7/1000 = 0.0070
RC PathWeight = 2/255 = 0.0078
```

3. We can than calculate the individual item weights via (PathWeight * MapScore * NavScore) where NavScore depends on the navigation string (see table above):

```
❶ MMI: (118 * 0.0070) * 0.90 (G/P) = 0.7434
❷ MMI: (118 * 0.0070) * 0.50 (O) = 0.4130
❸ RC: (28.1847 * 0.0078) * 0.80 (NIM) = 0.1769
❹ RC: (26.4019 * 0.0078) * 0.80 (NIM) = 0.1657
❺ RC: (26.0665 * 0.0078) * 0.80 (NIM) = 0.1635
```

4. Now we sum all of these individual item weights together to get our final TermWeight.

   0.7434❶ + 0.4130❷ + 0.1769❸ + 0.1657❹ + 0.1635❺ = 1.6625

   For our example "Blood Flow Velocity", we have a final TermWeight of 1.6625 and the five (5) different path entries have been summarized into a single term in our list containing the concept name, CUI, score (which is zero at this point), and the TermWeight that we just calculated.

   Blood Flow Velocity|C0005798|0|1.6625

5. The summarized list for all processed and summarized items will look similar to the following:

```
mt_table[0]:  DNA-Binding Proteins|C0012940|0|1.0150
mt_table[1]:  Transcription Factors|C0040648|0|1.0150
mt_table[2]:  SEF1 protein|C0212321|0|1.0150
mt_table[3]:  Blood Circulation Time|C0919393|0|1.1564
mt_table[4]:  Radionuclide Imaging|C0034606|0|1.1564
mt_table[5]:  Blood Flow Velocity|C0005798|0|1.6625
mt_table[6]:  Neurology|C0027855|0|0.4025
. . .
mt_table[84]:  Confusion|C0009676|0|0.1651
mt_table[85]:  Glasgow Coma Scale|C0017594|0|0.3287
mt_table[86]:  Predictive Value of Tests|C0032944|0|0.1651
mt_table[87]:  Regional Blood Flow|C0034965|0|0.1651
mt_table[88]:  Regression Analysis|C0034980|0|0.1651
```

3.5. Clustering

In the clustering phase, we are going to go through every item in our summarized and term weighted list looking for what other items in the list either co-occur with the item or are related via the MeSH tree structure to the item. In an attempt to make the process faster, we are going to compute the clustering in both directions as we progress through the items list. This means we only have to make a single pass through the list. The table below depicts how we progress through the item list computing from the item we are currently working on forward to the end of the item list. This works because the co-occurring and MeSH tree

relationship lists should always be symmetrical (e.g., if we have an entry A|B we also have an entry B|A) as defined by the UMLS Metathesaurus (see section entitled "UMLS Metathesaurus Files").

	0	1	2	. . .	86	87	88
0							
1	*						
2	*	*					
. . .	*	*	*				
86	*	*	*	*			
87	*	*	*	*	*		
88	*	*	*	*	*	*	

Figure 2: Picture of how we traverse the item list for clustering

The results of the clustering process are compartmented into co-occurring terms (cot) and MeSH tree relationship terms. The MeSH tree relationships are again compartmented into PAR/CHD/SIB (treerel) and then RN/RB/RO (othrel) (see section entitled "Related Concepts (File = MRREL)" for definitions).

3.5.1. Overview of Steps for Clustering

- For every item (i) in our summarized and term weighted list we do the following:
  1. For every item remaining (k) in our list ahead of i (e.g., i + 1 to n), we do the following:
     1) Retrieve the CUIs for item[i] and item[k]
     2) See if we have a co-occurring match of the item[i] and item[k] CUIs. If we do,
        i. Add an entry into item[i]'s cot list containing item[k]'s concept name, normalized frequency, and TermWeight.
        ii. Verify that we have the symmetrical co-occurring match of the item[k] and item[i] CUIs and add an entry into item[k]'s cot list containing item[i]'s concept name, normalized frequency, and TermWeight. Note: We might not have a match since we have removed some of the really low normalized frequency count items.
     3) See if we have a MeSH tree relationship match of the item[*i*] and item[*k*] CUIs. If we do, then for each match we have (**Note:** *there can be multiple MeSH tree relationship results*) do the following:
        i. Retrieve the relationship information from the match result and then:
        ii. If the relationship is Parent, Child, or Sibling (PAR/CHD/SIB) then:
            1. Add an entry into item[*i*]'s treerel list containing item[*k*]'s concept name, normalized frequency, and TermWeight.
            2. Add the symmetrical entry by adding an entry into item[*k*]'s treerel list containing item[*i*]'s concept name, normalized frequency, and TermWeight.

iii. If the relationship is Broader, Narrower, or Other (RN/RB/RO) then:

1. Add an entry into item[*i*]'s othrel list containing item[*k*]'s concept name, normalized frequency, and TermWeight.
2. Add the symmetrical entry by adding an entry into item[*k*]'s othrel list containing item[*i*]'s concept name, normalized frequency, and TermWeight.

3.5.2. Example of Clustering

In this example, we continue using our example concept "Blood Flow Velocity". Here we are showing the effects of the clustering on our concept. We have tied each of the example steps below to the steps described in the overview above by adding notations at the beginning of each line (e.g., (2.i) means step 2.i as described in the overview section). The first entry in the example below (mt_table[3] …) which is highlighted and annotated provides us with a good look at all of the aspects of the clustering process. "Blood Circulation Time"

1) We have an item that does not co-occur with and doesn't relate to in "Radionuclide Imaging",
2) We have an item that does co-occur with in "Blood Flow Velocity",
3) The "Blood Flow Velocity" item is not symmetrical since the inverse pairing was removed from the co-occurring table due to it's small normalized frequency count ("NOT FOUND"),
4) The "Blood Flow Velocity" item is related via the MeSH tree structure as a relationship other than synonymous, narrower, or broader (RO),
5) The "Blood Flow Velocity" item is related via the MeSH tree structure as a sibling (SIB),
6) Finally, the "Blood Flow Velocity" item shows how we are handling both directions in the single pass of clustering. The symmetrical entry for the "Blood Flow Velocity" item is automatically added here and doesn't need to be reviewed when we get to it later on.

```
(i) mt_table[3]: Blood Circulation Time
   (k) mt_table[4]: Radionuclide Imaging      <----\
      (2) No Co-Occurring Terms Found         <---------- (1)
      (3) No MeSH Tree Related Terms Found    <----/

   (k) mt_table[5]: Blood Flow Velocity
      (2.i) Co-Occurring Normalized Frequency: 0.0556  <------- (2)
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND  <----- (3)
      (3.i) MeSH Tree Relationship: RO    <----------------- (4)
      (3.i) MeSH Tree Relationship: SIB   <----------------- (5)
                . . .
(i) mt_table[5]: Blood Flow Velocity
   (k) mt_table[6]: Neurology
      (2) No Co-Occurring Terms Found
      (3) No MeSH Tree Related Terms Found
                . . .
   (k) mt_table[10]: Infant, Newborn
```

```
   (2.i) Co-Occurring Normalized Frequency: 0.0014
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0007
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[19]: Tomography, Emission-Computed
   (2.i) Co-Occurring Normalized Frequency: 0.0007
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[29]: Brain
   (2.i) Co-Occurring Normalized Frequency: 0.0072
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[33]: Homeostasis
   (2.i) Co-Occurring Normalized Frequency: 0.0012
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0007
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[35]: Craniocerebral Trauma
   (2.i) Co-Occurring Normalized Frequency: 0.0010
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0006
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[40]: Blood Vessels
   (2.i) Co-Occurring Normalized Frequency: 0.0067
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0048
   (3) No MeSH Tree Related Terms Found

(k) mt_table[41]: Vascular Diseases
   (2.i) Co-Occurring Normalized Frequency: 0.0012
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0009
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[46]: Cerebrovascular Circulation
   (2.i) Co-Occurring Normalized Frequency: 0.0244
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0046
   (3) No MeSH Tree Related Terms Found

(k) mt_table[47]: Gestational Age
   (2.i) Co-Occurring Normalized Frequency: 0.0005
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0005
   (3) No MeSH Tree Related Terms Found

(k) mt_table[48]: Infant, Premature
   (2.i) Co-Occurring Normalized Frequency: 0.0017
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0005
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[50]: Brain Ischemia
   (2.i) Co-Occurring Normalized Frequency: 0.0012
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[52]: Intracranial Pressure
   (2.i) Co-Occurring Normalized Frequency: 0.0012
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0014
   (3) No MeSH Tree Related Terms Found

(k) mt_table[53]: Oxygen
   (2.i) Co-Occurring Normalized Frequency: 0.0043
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0005
   (3) No MeSH Tree Related Terms Found
            . . .
(k) mt_table[55]: Heart Rate
   (2.i) Co-Occurring Normalized Frequency: 0.0017
   (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
   (3.i) MeSH Tree Relationship: SIB
            . . .
(k) mt_table[61]: Umbilical Arteries
   (2.i) Co-Occurring Normalized Frequency: 0.0112
```

```
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0163
      (3) No MeSH Tree Related Terms Found

   (k) mt_table[62]: Xenon Radioisotopes
      (2.i) Co-Occurring Normalized Frequency: 0.0005
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0041
      (3) No MeSH Tree Related Terms Found
               . . .
   (k) mt_table[64]: Cerebrospinal Fluid Pressure
      (2.i) Co-Occurring Normalized Frequency: 0.0005
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0027
      (3) No MeSH Tree Related Terms Found
               . . .
   (k) mt_table[70]: Tomography, X-Ray Computed
      (2.i) Co-Occurring Normalized Frequency: 0.0007
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
      (3) No MeSH Tree Related Terms Found

   (k) mt_table[71]: Blood Pressure
      (2.i) Co-Occurring Normalized Frequency: 0.0184
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0017
      (3.i) MeSH Tree Relationship: SIB
               . . .
   (k) mt_table[74]: Aging
      (2.i) Co-Occurring Normalized Frequency: 0.0031
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: NOT FOUND
      (3) No MeSH Tree Related Terms Found
               . . .
   (k) mt_table[77]: Echoencephalography
      (2.i) Co-Occurring Normalized Frequency: 0.0024
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0061
      (3) No MeSH Tree Related Terms Found

   (k) mt_table[78]: Linear Models
      (2.i) Co-Occurring Normalized Frequency: 0.0005
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0018
      (3) No MeSH Tree Related Terms Found
               . . .
   (k) mt_table[87]: Regional Blood Flow
      (2.i) Co-Occurring Normalized Frequency: 0.0014
      (2.ii) Co-Occurring Symmetrical Match Normalized Frequency: 0.0058
      (3.i) MeSH Tree Relationship: SIB

   (k) mt_table[88]: Regression Analysis
      (2) No Co-Occurring Terms Found
      (3) No MeSH Tree Related Terms Found
```

After all of the clustering process has completed – the following list contains the co-occurrence and relationship information we have accumulated for our example. This information consists of concept name, normalized frequency, and TermWeight for each item clustered together with our term.

```
mt_table[5]: Blood Flow Velocity|C0005798|0|1.6625
      cot[0]: Infant, Newborn  normfreq: 0.0014  termweight: 0.9240
      cot[1]: Tomography, Emission-Computed  normfreq: 0.0007  termweight: 0.4136
      cot[2]: Brain  normfreq: 0.0072  termweight: 1.1118
      cot[3]: Homeostasis  normfreq: 0.0012  termweight: 0.4327
      cot[4]: Craniocerebral Trauma  normfreq: 0.0010  termweight: 0.2316
      cot[5]: Blood Vessels  normfreq: 0.0067  termweight: 0.0105
      cot[6]: Vascular Diseases  normfreq: 0.0012  termweight: 0.0105
      cot[7]: Cerebrovascular Circulation  normfreq: 0.0244  termweight: 2.1469
      cot[8]: Gestational Age  normfreq: 0.0005  termweight: 0.3901
      cot[9]: Infant, Premature  normfreq: 0.0017  termweight: 0.4203
      cot[10]: Brain Ischemia  normfreq: 0.0012  termweight: 0.8588
      cot[11]: Intracranial Pressure  normfreq: 0.0012  termweight: 0.5694
      cot[12]: Oxygen  normfreq: 0.0043  termweight: 0.3911
      cot[13]: Heart Rate  normfreq: 0.0017  termweight: 0.1768
      cot[14]: Umbilical Arteries  normfreq: 0.0112  termweight: 0.1768
      cot[15]: Xenon Radioisotopes  normfreq: 0.0005  termweight: 0.3425
      cot[16]: Cerebrospinal Fluid Pressure  normfreq: 0.0005  termweight: 0.2144
```

```
cot[17]: Tomography, X-Ray Computed  normfreq: 0.0007  termweight: 0.3767
cot[18]: Blood Pressure  normfreq: 0.0184  termweight: 0.1659
cot[19]: Aging  normfreq: 0.0031  termweight: 0.1657
cot[20]: Echoencephalography  normfreq: 0.0024  termweight: 0.1657
cot[21]: Linear Models  normfreq: 0.0005  termweight: 0.1657
cot[22]: Regional Blood Flow  normfreq: 0.0014  termweight: 0.1651

treerel[0]: Blood Circulation Time  rel: SIB  termweight: 1.1564
treerel[1]: Heart Rate  rel: SIB  termweight: 0.1768
treerel[2]: Blood Pressure  rel: SIB  termweight: 0.1659
treerel[3]: Regional Blood Flow  rel: SIB  termweight: 0.1651

othrel[0]: Blood Circulation Time  rel: RO  termweight: 1.1564
```

3.6. Calculating the RankScore

This is the final stage were we go through all of the information saved from the previous steps and calculate a final RankScore for each item based on the TermWeight, the normalized frequency count, and user specified constants for COT, REL, Title, and PathWeight. The formula for the RankScore is as follows:

$$RankScore = TW * \left[F * \left[1 + \sum_{j=1}^{n} (COT_j * TW_j) + \sum_{k=1}^{n} (REL * TW_k) \right] \right]$$

Equation 2 - RankScore Formula

The following table depicts the user-defined parameters we use in calculating the RankScore along with their default values:

Abbreviation	Description	Tunable by User	Default Value
COT	Factor for Co-Occurring Terms	X	10,000
REL	Factor for Tree Relationship	X	100
TW	TermWeight	-	-
F	Path Factor: If the item comes from MetaMap or Trigrams AND also from PubMed Related Citations F = 2 otherwise F = 1	-	-

3.6.1. Summary of Steps for Calculating the RankScore

1. Set score = 1,
2. Compute scores for the co-occurring terms,
3. Add scores for the PAR/CHD/SIB MeSH tree related terms,
4. Add scores for the RN/RB/RO MeSH tree related terms,
5. Set up and factor in the Path Factor for the item based on what paths recommended the item, and
6. Finally, factor in the TermWeight for the item into the score.

3.6.2. Example of Calculating the RankScore

1. Set score = 1
2. For each of the co-occurring terms (cot) items we found in clustering, do the following:

   score = score + (**term's normalized frequency count** * COT * **term's term weight**)

```
cot[0]: Infant, Newborn  normfreq: 0.0014  termweight: 0.9240
  score = 1.0000 + (0.0014 * 10000 * 0.9240) == 14.2594
cot[1]: Tomography, Emission-Computed  normfreq: 0.0007  termweight: 0.4136
  score = 14.2594 + (0.0007 * 10000 * 0.4136) == 17.2287
cot[2]: Brain  normfreq: 0.0072  termweight: 1.1118
  score = 17.2287 + (0.0072 * 10000 * 1.1118) == 97.0027
cot[3]: Homeostasis  normfreq: 0.0012  termweight: 0.4327
  score = 97.0027 + (0.0012 * 10000 * 0.4327) == 102.1775
cot[4]: Craniocerebral Trauma  normfreq: 0.0010  termweight: 0.2316
  score 775 = 102.1775 + (0.0010 * 10000 * 0.2316) == 104.3940
cot[5]: Blood Vessels  normfreq: 0.0067  termweight: 0.0105
  score = 104.3940 + (0.0067 * 10000 * 0.0105) == 105.0971
cot[6]: Vascular Diseases  normfreq: 0.0012  termweight: 0.0105
  score = 105.0971 + (0.0012 * 10000 * 0.0105) == 105.2227
cot[7]: Cerebrovascular Circulation  normfreq: 0.0244  termweight: 2.1469
  score = 105.2227 + (0.0244 * 10000 * 2.1469) == 628.9811
cot[8]: Gestational Age  normfreq: 0.0005  termweight: 0.3901
  score = 628.9811 + (0.0005 * 10000 * 0.3901) == 630.8457
cot[9]: Infant, Premature  normfreq: 0.0017  termweight: 0.4203
  score = 630.8457 + (0.0017 * 10000 * 0.4203) == 637.8818
cot[10]: Brain Ischemia  normfreq: 0.0012  termweight: 0.8588
  score = 637.8818 + (0.0012 * 10000 * 0.8588) == 648.1532
cot[11]: Intracranial Pressure  normfreq: 0.0012  termweight: 0.5694
  score = 648.1532 + (0.0012 * 10000 * 0.5694) == 654.9635
cot[12]: Oxygen  normfreq: 0.0043  termweight: 0.3911
  score = 654.9635 + (0.0043 * 10000 * 0.3911) == 671.8002
cot[13]: Heart Rate  normfreq: 0.0017  termweight: 0.1768
  score = 671.8002 + (0.0017 * 10000 * 0.1768) == 674.7606
cot[14]: Umbilical Arteries  normfreq: 0.0112  termweight: 0.1768
  score = 674.7606 + (0.0112 * 10000 * 0.1768) == 694.6397
cot[15]: Xenon Radioisotopes  normfreq: 0.0005  termweight: 0.3425
  score = 694.6397 + (0.0005 * 10000 * 0.3425) == 696.2769
cot[16]: Cerebrospinal Fluid Pressure  normfreq: 0.0005  termweight: 0.2144
  score = 696.2769 + (0.0005 * 10000 * 0.2144) == 697.3019
cot[17]: Tomography, X-Ray Computed  normfreq: 0.0007  termweight: 0.3767
  score = 697.3019 + (0.0007 * 10000 * 0.3767) == 700.0068
cot[18]: Blood Pressure  normfreq: 0.0184  termweight: 0.1659
  score = 700.0068 + (0.0184 * 10000 * 0.1659) == 730.5548
cot[19]: Aging  normfreq: 0.0031  termweight: 0.1657
  score = 730.5548 + (0.0031 * 10000 * 0.1657) == 735.7051
cot[20]: Echoencephalography  normfreq: 0.0024  termweight: 0.1657
  score = 735.7051 + (0.0024 * 10000 * 0.1657) == 739.6677
cot[21]: Linear Models  normfreq: 0.0005  termweight: 0.1657
  score = 739.6677 + (0.0005 * 10000 * 0.1657) == 740.4596
cot[22]: Regional Blood Flow  normfreq: 0.0014  termweight: 0.1651
  score = 740.4596 + (0.0014 * 10000 * 0.1651) == 742.8291
```

The score at the end of processing the co-occurring terms is 742.8291.

3. For each of the PAR/CHD/SIB MeSH tree related terms (treerel) items we found in clustering, do the following:

   score = score + (**term's term weight** * REL)

```
treerel[0]: Blood Circulation Time  rel: SIB  termweight: 1.1564
  score = 742.8291 + (1.1564 * 100) == 858.4691
treerel[1]: Heart Rate  rel: SIB  termweight: 0.1768
  score = 858.4691 + (0.1768 * 100) == 876.1536
treerel[2]: Blood Pressure  rel: SIB  termweight: 0.1659
  score = 876.1536 + (0.1659 * 100) == 892.7405
treerel[3]: Regional Blood Flow  rel: SIB  termweight: 0.1651
  score = 892.7405 + (0.1651 * 100) == 909.2529
```

The score at the end of processing the PAR/CHD/SIB MeSH tree related terms is 909.2529.

4. For each of the RN/RB/RO MeSH tree related terms (othrel) items we found in clustering, do the following:

   score = score + (**term's term weight** * REL)

```
othrel[0]: Blood Circulation Time  rel: RO  termweight: 1.1564
  score = 909.2529 + (1.1564 * 100) == 1024.8929
```

The score at the end of processing the RN/RB/RO MeSH tree related terms is 1024.8929.

5. Set up the Path Factor for this item based on what paths recommended the item. If MetaMap or Trigram recommended the item AND the item was recommended by PubMed Related Citations, Path Factor equals two, otherwise it equals 1. MetaMap and PubMed Related Citations both recommended our example "Blood Flow Velocity" so the Path Factor is equal to two.

   score = score * Path Factor (F)

```
score = 1024.8929 * 2 == 2049.7858
```

The score at the end of processing the Path Factor is 2049.7858.

6. Factor in the item's TermWeight for the final RankScore.

   score = score * Item's TermWeight

```
mt_table[5]:  Blood Flow Velocity|C0005798|0|1.6625
score = 2049.7858 * 1.6625 == 3407.7688
```

The final RankScore at the end of processing is **3407.7688**. This number than gets truncated (not rounded) to **3407**.

The final summarized, clustered, and rank scored (not ordered by score at this point) will look similar to the following:

```
mt_table[0]:  DNA-Binding Proteins|C0012940|1478|1.0150
mt_table[1]:  Transcription Factors|C0040648|1707|1.0150
mt_table[2]:  SEF1 protein|C0212321|207|1.0150
mt_table[3]:  Blood Circulation Time|C0919393|2411|1.1564
mt_table[4]:  Radionuclide Imaging|C0034606|260|1.1564
mt_table[5]:  Blood Flow Velocity|C0005798|3407|1.6625
mt_table[6]:  Neurology|C0027855|89|0.4025
. . .
mt_table[84]:  Confusion|C0009676|55|0.1651
mt_table[85]:  Glasgow Coma Scale|C0017594|246|0.3287
mt_table[86]:  Predictive Value of Tests|C0032944|32|0.1651
mt_table[87]:  Regional Blood Flow|C0034965|118|0.1651
mt_table[88]:  Regression Analysis|C0034980|22|0.1651
```

4. Determining Heading Mapped to (Optional)

- Heading Mapped to (HM) information is used in three different ways in MTI.
    1. During the clustering process if the Medium Filtering option is selected to build a table of related terms that the Medium Filtering uses.
    2. During the Float Chemicals stage where the HMs for each chemical term are searched for to boost the chemical term's score.
    3. Used in displaying the indexing results if the user has selected the "showHMs" option.
- The list of valid HMs is created for all of the chemicals from the UMLS® Metathesaurus® MRREL (Related Concepts) file. Whenever we find a line with "|RN|", "|MSH|", and "|mapped to|" in the MRREL file, we consider it a valid link between a chemical and the Heading Mapped to. For example,

  The following sample entries come from the 2005AC UMLS:

```
C0000039|RN|C0043950|mapped_to|MSH|MSH||
C0000039|RN|C0216971|isa|NDFRT|NDFRT||
C0000039|RN|C0216971|mapped_to|MSH|MSH||
C0000039|RN|C0381030|mapped_to|MSH|MSH||
```

We would ignore the second line "`C0000039|RN|C0216971|isa|NDFRT|NDFRT||`" since it's not a "mapped_to" line. The other lines tell us the following (remember the CUIs are in reverse position to what you might think).

```
C0043950|1,3-dipalmitoyl-2-phosphatidylcholine
C0216971|colfosceril palmitate
C0381030|DEPN 8
```

All of these have the Heading Mapped to of the UMLS concept and MeSH Heading corresponding to CUI C0000039 which is "1,2-Dipalmitoylphosphatidylcholine".

5. Boosting New Terms

At the beginning of each new MeSH Indexing year, MTI transitions to the new MeSH Indexing data set involving the MeSH Headings that will be used during the upcoming Indexing year. During this transition, there are always new terms added that haven't been used before and won't show up in the Related Citations results until later in the year when the Indexers have had time and cause to use them. So, for these new MeSH Headings, we apply a boosting factor to ensure that we do recommend them when they are found by the MetaMap MMI path. See ***Appendix-J*** for a complete list of New terms. Right after the clustering process has finished and we've sorted all of the entries into the newly scored order, we go through the list looking for any of the new terms and if we find one, we set the score to the highest score – 1 to ensure that we recommend it.

6. Emphasize Titles

- Uses MeSH Terms list
- Done for all MeSH Terms in the list

MeSH terms that are identified to be from the Title section of the processed text have their score boosted via the following formula:

score = current score + (current_score * 2)

7. Emphasize HSTAR (Optional)

- Uses MeSH Terms list
- Done for all MeSH Terms in the list
- Only done when user specifically requests this type of score boosting.

MeSH terms that are identified to be from one of the following MeSH tree hierarchies:

- N01 – N05
  Population Characteristics [N01], Health Care Facilities, Manpower, and Services [N02], Health Care Economics and Organizations [N03], Health Services Administration [N04], Health Care Quality, Access, and Evaluation [N05]
- G02 – G03 *Health Occupations [G02], Environment and Public Health [G03]*
- L01 *Information Science [L01]*

have their score boosted via the following formula:

score = current score + (current_score * HSTAR_FACTOR)

Where HSTAR_FACTOR is the multiplier specified by the user. We are currently using 20 with limited success.

8. Float Chemicals

- Uses MeSH Terms list
- Done for all MeSH Terms in the list

Make all chemical (NM) terms score greater than the highest scoring MeSH Heading Mapped to. If the term is a NM, then perform a lookup of the validHMs list to receive a set of MeSH Headings that are Mapped to (HM) this term. We then find the highest scoring HM that is associated with this NM term and set the NM term's score to the highest score plus one.

The following example illustrates how chemicals (NMs) are "floated" up in the MeSH Term list:

Example:

Given the following list after Clustering (list shows MeSH term and associated initial score):

1. Pyrones|26688
2. tipranavir|22812
3. Biological Availability|21954
4. Antacids|20988
5. Pyridines|17301
6. HIV Protease Inhibitors|3077
7. Food|8376
8. Food-Drug Interactions|2379
9. Magnesium Hydroxide|1735
10. Fasting|1598
11. Aluminum Hydroxide|1273
12. Protease Inhibitors|3756
13. Administration, Oral|1048
14. Area Under Curve|1000
15. Indinavir|737
16. Dietary Fats|594
17. Capsules|573
18. Acetamides|510
19. Eating|407
20. Piperidines|381
21. Intestinal Absorption|359
22. Tablets|355
23. Fats|349
24. Tetrazoles|288
25. Pharmacokinetics|273
26. Butyrophenones|272
27. Cross-Over Studies|244
28. Drug Interactions|234
29. Anti-Infective Agents|217
30. Ketoprofen|209
31. Magnesium|193
32. Biphenyl Compounds|184
33. Voluntary Workers|537
34. Chromatography, High Pressure Liquid|162
35. Antiviral Agents|159
36. Analysis of Variance|151
37. Analgesics, Non-Narcotic|149
38. Half-Life|139
39. Histamine H1 Antagonists|128
40. Tromethamine|117
41. Antihypertensive Agents|117
42. Gastric Acidity Determination|116
43. Absorption|112
44. Drug Administration Schedule|109
45. aluminum magnesium hydroxide|102
46. Sedatives, Nonbarbiturate|102

#2 tipranavir with initial score of 22,812:

validHMs provides the following list of Headings Mapped to (HM):

- Pyridines with a score of 17,301
- Pyrones with a score of 26,688

Final score for tipranavir becomes 26,689 (score of highest scoring Term (Pyrones|26,688) plus one.

#45 aluminum magnesium hydroxide with initial score of 102:

validHMs provides the following list of Headings Mapped to (HM):

- Aluminum Hydroxide with a score of 1,273
- Drug Combinations which is not in the list
- Magnesium Hydroxide with a score of 1,735

Final score for aluminum magnesium hydroxide becomes 1,736 (score of highest scoring Term (Magnesium Hydroxide|1,735) plus one.

9. Determine TopN Terms List

- Uses freshly sorted MeSH Terms list
- Done for TopN MeSH Terms in the list only

We want to find the TopN MeSH Heading (MH) terms in our sorted by score list ignoring CheckTags (CT) and SubHeadings (SH) terms in the list. We are going to ignore the CTs and SHs because they are handled separately.

Example:

The user requests TopN to be 25.

1. If we find a CT at positions 7 and 15 in the first 25 terms, we increment TopN for each occurrence (two in this case) to make it 27.
2. If we than find a SH at position 26 in the list, we increment TopN by one which gives us 28.
3. So, the TopN that we will use for the remainder of processing is actually 28 because we want to ignore the CTs at position 7 and 15 and ignore the SH at position 26.

10. Senile Plaque/Dental Plaque Disambiguation

- Uses MeSH Treecodes to disambiguate terms.
- Done for all MeSH Terms in the list

MetaMap currently cannot distinguish between the MeSH terms "Senile Plaque" and "Dental Plaque" when it encounters the term "plaque" during processing. This is known as an ambiguity. This filtering step uses the MeSH treecodes of all the other terms (from all pathways) to help determine the context of the remainder of the text being processed which is why this disambiguation is not accomplished earlier in the "Exclusion" step. We check to see if there is any contextual evidence that we should pick Dental Plaque over Senile Plaque by reviewing the treecodes for the entire list of MeSH terms. If we find any term within A03.556.500.379 or A14.549.167 (*Dentition*), C07.465 (*Mouth Disease*), or C07.793 (*Tooth Diseases*) – except for A12.300.300 and C07.793.208.377(*Dental Plaque*) we choose Dental Plaque and remove any terms related to Senile Plaque. Otherwise, we remove all terms associated with Dental Plaque. **Note:** We except A12.300.300 and C07.793.208.377 because they are the treecodes for Dental Plaque – the MeSH term we are performing the search for and we don't want to bias our review of the contextual data by counting it.

11. Medium Filtering (Optional)

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list only.
- Only done when user specifically requests this type of term evaluation and processing.

Medium Filtering involves considering the specificity in hierarchies, retaining and removing Terms in the TopN based on their MeSH tree codes. The retaining and removing are done based on several Exceptions (see ***Appendix-A***) and Heuristics (see ***Appendix-B***) which are processed in the following hierarchical order for the TopN terms in the list:

1. Calculate word counts for each term – to be used in the strcheck Exception.
2. Check Exemptions found in Heuristic #1 a-e, g, and then f.
3. Determine Exceptions 0, A-G.
4. Remove Terms based on Heuristic #2, #3a, #3b, #4, #5, #6, #7, #8, #9, #10 in order of Heuristic number.

12. Validate TopN Terms

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list, which survived the Medium Filtering removal process and the MH/SH Substitution process only.

For each TopN MeSH Term which is a MH or CT the following tests are run in order with their corresponding additions of CheckTags and SubHeadings taking place when appropriate. See ***(Appendix-L)*** for full details on each of the lists mentioned below.

if CUI = C0042542 (Vero Cells), then add MH+ of Cercopithecus aethiops AND CT of Animals.

if CUI = C0085080 (Chinese hamster ovary cell), then add CT of Cricetinae (Hamster) AND Animals.

if CUI is in Adolescence list, then add CT of Adolescence AND CT of Humans.

if CUI is in Aged list, then add CT of Aged AND CT of Humans.

if CUI is in Animal list, then add CT of Animals.

if CUI is in Cattle list, then add CT of Cattle AND CT of Animals.

if CUI is in Cat list, then add CT of Cat AND CT of Animals.

if CUI is in Dog list, then add CT of Dog AND CT of Animals.

if CUI is in Female list, then add CT of Female.

if CUI is in Human list, then add CT of Humans.

if CUI is in Newborn list, then add CT of Infant, Newborn AND CT of Humans.

if CUI is in Male list, then add CT of Male.

if CUI is in Pregnant list, then add CT of Pregnancy AND if Female hasn't already been added, add Female.

if CUI is in Mice list and recommendation is from MetaMap, then add CT of Mice AND Animals.

if CUI is in Rats list and recommendation is from MetaMap, then add CT of Rats AND Animals.

if CUI is in Sheep list and recommendation is from MetaMap, then add MH+ of Sheep AND CT of Animals.

if CUI is in Swine list and recommendation is from MetaMap, then add MH+ of Swine AND CT of Animals.

if CUI is in United States list and recommendation is from MetaMap, then add MH+ of United States.

if Male CT not used AND this concept has a tree code found in the Male tree list, add CT of Male.

if Mice CT not used AND recommendation is from MetaMap, AND this concept has a tree code found in the Mice tree list, add CT of Mice AND add CT of Animals.

if Rat CT not used AND recommendation is from MetaMap, AND this concept has a tree code found in the Rat tree list, add CT of Rat AND add CT of Animals.

if Female CT not used AND this concept has a tree code found in the Female tree list, add CT of Female.

if Pregnancy CT not used AND this concept has a tree code found in the Pregnancy tree list, add CT of Pregnancy AND add CT of Female.

if Infant, Newborn CT not used AND this concept has a tree code found in the Newborn tree list, add CT of Infant, Newborn AND add CT of Humans.

if Animals CT not used AND this concept has a tree code found in the Animal tree list, add CT of Animals.

if Aged CT not used AND this concept has a tree code found in the Aged tree list, add CT of Aged AND add CT of Humans.

if Humans CT not used AND this concept has a tree code found in the Humans tree list, add CT of Humans.

if Cricetinae (Hamster) CT not used AND recommendation is from MetaMap, AND this concept has a tree code found in the Cricetinae (Hamster) tree list, add CT of Cricetinae (Hamster) AND add CT of Animals.

if United States MH+ not used AND this concept has a tree code found in the United States tree list, add MH+ of United States.

if the concept's tree code is in "G05" (Genetic Processes) , "G13" (Genetic Phenomena),
"G14" (Genetic Structures), "G01.273.343" (Genetics), "H01.158.273.343" (Genetics),
"N02.421.308" (Genetic Services), add SH "genetics".

else if the concept's tree code is in "K01.316" (Ethics), "K01.752.256" (Ethics),
"N05.350" (Ethics), add SH "ethics".

else if the concept's tree code is in "G04.610" (Immunity), "D23.050" (Antigens), "D12.776.124.486.485.114", "D12.776.124.790.651.114", and "D12.776.377.715.548.114" (Antibodies), add SH "immunology".

else if the concept's tree code is in "G03.850.310" (Disease Transmission), add SH "transmission".

else if the concept's tree code is in "G12.091.690.140" (Biotransformation), add SH "pharmacokinetics".

else if the concept's tree code is in "G04.185.515.880" (Viral Physiology), add SH "virology".

else if the concept's tree code is in "E01.370.350.700" (Radiography), add SH "radiography".

else if the concept's tree code is in "E01.370.384.730" (Radionuclide Imaging), add SH "radionuclide imaging".

else if the concept's tree code is in "E01.370.350.850" (Ultrasonography), add SH "ultrasonography".

else if the concept's tree code is in "E02.815" (Radiotherapy) AND NOT in "E02.810.530" (Radiosurgery) AND NOT in "E02.810.814" (Whole-Body Irradiation), add SH "radiotherapy".

else if the concept's tree code is in "E02.831" (Rehabilitation), add SH "rehabilitation".

else if the concept's tree code is in "E04.936" (Transplantation) AND NOT in "E04.936.494" (Replantation), add SH "transplantation".

else if the concept's tree code is in "E04" AND NOT in E01 (Diagnosis), add SH "surgery".

else if the concept's tree code is in "N03.219" (Economics) add SH "economics".

13. MH/SH Substitution

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list, which survived the Medium Filtering removal process only.

If a Term is a MeSH Heading (MH) and there is a corresponding SubHeading (SH), only show the SubHeading Term.

1. First we look for a direct match in the TopN MH Terms of a SubHeading anywhere else in the list. If we find a match, we are done looking and the substitution takes place. e.g., MH of "Pharmacokinetics" becomes SH of "pharmacokinetics".
2. If we don't find a direct match above, we go through the supplemental MH/SH Lookup list (***Appendix-G***). If we find a match from the lookup list, the substitution takes place.

14. Add "drug therapy" SH

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list, which survived the Medium Filtering removal process and the MH/SH Substitution process only.

When therapy (SH) has been recommended AND either: the concept's tree code is in E02.319 (*Drug Therapy*), except E02.319.703 (*Premedication*) OR a term has been exempted on account of Heuristic #1f - add SH of "drug therapy".

15. Drop "physiology" & "analysis" SHs

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list, which survived the Medium Filtering removal process and the MH/SH Substitution process only.

- Remove physiology (SH) unless some term in topN is in Categories G04 or in G06-G11.
- Remove analysis (SH) unless some term in topN is in Categories D01-D25 OR in E05 (*Investigative Techniques*) OR in H01.181.341 (*Chemistry, Clinical*).

16. Add CheckTags from Text and doAgedReview (Optional)

- Uses the Title and Abstract fields from the actual text of the citation.
- Done for all CheckTag substitutions found in the CheckTag Lookup list.

If a Term in the lookup list is found in the text of either the Title or the Abstract, we verify that the CheckTag has not already been added as a result and if it hasn't, we add it. Care is taken to make sure that CheckTags in the lookup table map to actual words in the text and are not part of other words.

If the user has specified the "**doAgedReview**" option, we also perform the following checks during the Add CheckTags phase.

1. If "Animals" is set, we remove any age related checktags ("Adolescence", "Adult", "Aged", "Child", "Infant", "Infant, Newborn").
2. If "Animals" is NOT set, and we have any age related checktags ("Adolescence", "Adult", "Aged", "Child", "Infant", "Infant, Newborn"), we add checktag "Humans" if it is not already specified.

17. Add Geographics from Text (Optional)

- Uses the Title and Abstract fields from the actual text of the citation.
- Done for all Geographic substitutions found in the Geographics Lookup list (***Appendix-F***).

If a Geographic Term (City/Town names) in the lookup list is found in the text of either the Title or the Abstract, we verify that the Geographic has not already been added as a result and if it hasn't, we add it. Care is taken to make sure that Geographic's in the lookup table map to actual words in the text and are not part of other words.

18. Strict Filtering (Optional)

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list only.
- Only done when user specifically requests this type of term evaluation and processing.

Strict Filtering involves removing any item on the list not specifically recommended by both the MetaMap and PubMed Related Citations paths.

19. Update Chemicals (Optional)

Every Monday morning the MeSH Supplemental Concepts list is updated. We download this list and compare it to our baseline list (first of the new MeSH Indexing year). We determine which Supplemental Concepts are new, to be removed, or have been replaced. If the user has elected this option, the Update Chemicals section of the program (checkForSupChemMods) reviews the list of results MTI is going to be presenting and performs and deletions or replacements based on the most recent information. The routine also verifies that in the case of replacement, we are not creating a duplicate entry.

20. Add USA CheckTag from Text (Optional)

This review is only performed if the user has elected this option AND the "United States" CheckTag is not already present. For this review, we go through the text of the item/citation that we are processing looking for any occurrences of items on the "USAtriggers" ***(Appendix-K)*** list. This list contains items like "American Cancer Society" and "United States Social Security Administration".

21. Display Results

- Uses MeSH Terms list
- Done for TopN MeSH Terms in the list that have survived the Medium Filtering removal process and the MH/SH Substitution process only.

In the display results section of the program, we still have the potential of adding new terms based on items found in the entire MeSH Term list (see step 3 below). For all but Step #3 below, we only use the TopN MeSH Terms. The list below details the ordering of how we print out the final results of the MTI.

1. For each of the TopN Terms in the list that are "***oktoprint***" (not removed due to the filtering or substitution) and are either MH, HM, or NM – we print out the result. We also apply options like ***showET*** (replacing MH with ET – see description below) and ***starMHTI*** (star MHs that come title) at this stage.
2. Print the separator "------"
3. For Terms below TopN (TopN + 1 – end of list), we check to see if there might be any "Special Terms". Where "Special Terms" are terms deemed "special" by the program and include MHs that are out of the scope of our normal recommendation scoring by virtue of being scored lower than TopN. They must have a tree code that falls within one of the following trees: "Z01" [except Z01.433 (*Cities*) and Z01.586 (*Historical Geographic Locations*)], "E05.318.760.500" (*Epidemiologic Studies*), "G03.850.520.450.500" (*Epidemiologic Studies*), and "N05.715.360.775.175" (*Epidemiologic Studies*). These terms are printed using a "MH-S" denotation.
4. Print out Other Terms – which are derived through the validation rules. These terms are printed using a "MH+" denotation (***see 11. "Validate TopN Terms" for full explanation of MH+ terms***).
5. Print out CheckTags found in the TopN and then any added through the validation process.
6. Print out SubHeadings found in TopN AND have a score > 200 and any added through the validation process.

21.1. showHMs Display Option

This option simply tells us to display "HM" instead of "MH" for MeSH Headings that have been identified as "Heading Mapped to" for another MeSH Heading (usually a chemical) in our list. We use this option for one of our regular processing jobs to tag HM terms so they are not displayed.

21.2. limitTitleOnly Display Option

This option is used to limit the number of recommendations the MTI system provides when a citation only has a Title field and no Abstract field and is based on the number of words found in the Title field (a word is defined as text bounded by whitespace for this option).

# of Title Words	# of Recommendations
0, 1, 2	7
3, 4	8
5, 6	10
7, 8, 9, 10	11
11, 12, 13, 14	12
15, 16, 17, 18	13
19, 20, 21	14
> 21	13

21.3. RSfilterTO Display Option

This option is used in conjunction with the "**limitTitleOnly**" option to further refine the number of recommendations that are presented when we only have a Title field. If the rank of the term is >= 10 and the score is < 190, we stop providing recommendations. This is mainly used in longer title only situations since the "**limitTitleOnly**" sets a smaller limit until the number of words is more than six.

21.4. limitPTs Display Option

This option is used to limit the number of recommendations the MTI system provides when a citation has been identified as coming from particular Publication Types like "Review" or "Editorial" (***see Appendix-N for complete list***). If there is one or more "PT -" fields in a citation that we are processing, at least one of them appears in our special Publication Type list, and the user has specified the "limitPTs" display option, we limit the number of recommendations provided based on each special Publication Type.

21.5. showETs Display Option

This option determines whether we display an Entry Term (ET) for a given MeSH Heading (MH). This only works with MetaMap-provided terms since MetaMap marks when a term is found in the Title or Abstract and provides us with information detailing what triggered the term and where the trigger was located. The following all have to be true before we can continue:

1. The user has to have specified the "showETs" option.
2. The MeSH Heading must have at least one valid Entry Term identified by MetaMap as a trigger for the MeSH Heading. If we don't have a valid Entry Term for the MeSH Heading, we simply display the MeSH Heading.

Once these conditions exist, we then have to review the following rules:

1. If the MeSH Heading was found in the Title, it was specified directly from MetaMap, and not derived via the Restrict to MeSH process - we display the original MeSH Heading.
2. If the MeSH Heading (directly from MetaMap) was found only in the Abstract and a valid Entry Term for this MeSH Heading was also only found in the Abstract, we keep the original MeSH Heading.
3. If the MeSH Heading (directly from MetaMap) was found only in the Abstract and a valid Entry Term for this MeSH Heading was found in the Title, we make the substitution and display the Entry Term.
4. If the MeSH Heading was derived via Restrict to MeSH instead of coming directly from MetaMap – we make the substitution and display the Entry Term.

When we substitute the Entry Term for the MeSH Heading, we display the first Entry Term identified by MetaMap.

The following example illustrates the different set of recommendations provided with and without the "showETs" option set. The side with the option set also illustrates the process of going through the conditions and rules before decisions are made. The example consists of a real citation found in PubMed and then modified slightly to illustrate the "showETs" option.

PMID- 99999999
TI - Cross-species retroviral transmission from macaques to human beings.
AB - Cross-species transmission of simian foamy virus (SFV) to human beings from chimpanzees, baboons, and African green monkeys has been described. Although macaques are the non-human primate most often handled in research, human infection with SFV from macaques has not been reported. Two of 46 primate-facility workers tested positive for antibodies that reacted with an immunoblot that contained macaque foamy virus antigens. Phylogenetic assessment of a 96-bp fragment of amplified proviral DNA isolated from peripheral-blood mononuclear cells from one infected individual was consistent with SFV infection of macaque origin. Frequent use of macaques in biomedical research, and identification of persistent retroviral infection from macaques to human beings, could have implications for public-health policy and occupational health and safety. We performed this evaluation using a critique, and an evaluation methodology using measures of theoretical effectiveness.

Without showETs Option	With showETs Option
*Macaca|C0024398|29574|MH||TI|MM;RC	*Macaques|C0024398|29574|ET|
Spumavirus|C0080180|9075|MH||AB|MM;RC	**Replaces "Macaca" - Alternative(s) (Macaque)**|TI|MM;RC
Cercopithecus aethiops|C0007754|6371|MH||AB|MM;RC	Simian Foamy Virus|C0080153|9075|ET|
*Retroviridae|C0035366|4026|MH||TI|MM;RC	Replaces **"Spumavirus" - Alternative(s) (Foamy Virus)**|AB|MM;RC
Papio|C0030362|3951|MH||AB|MM;RC	Monkey, African Green|C1022339|6371|ET|
Retroviridae Infections|C0035369|3151|MH||AB|MM;RC	**Replaces "Cercopithecus aethiops"**|AB|MM;RC
Simian T-lymphotropic virus 1|C0038344|1610|MH|||RC	*Retroviridae|C0035366|4026|MH||TI|MM;RC
Pan troglodytes|C0008111|1429|MH||AB|MM;RC	Baboons|C0030362|3951|ET|**Replaces "Papio"**|AB|MM;RC
Primates|C0033147|1162|MH||AB|MM;RC	Retroviridae Infections|C0035369|3151|MH||AB|MM;RC
Molecular Sequence Data|C0026382|981|MH|||RC	Simian T-lymphotropic virus 1|C0038344|1610|MH|||RC
Monkey Diseases|C0026431|981|MH|||RC	Chimpanzees|C0008111|1429|ET|**Replaces "Pan troglodytes"**|AB|MM;RC
Macaca mulatta|C0024400|837|MH|||RC	Primates|C0033147|1162|MH||AB|MM;RC
Base Sequence|C0004793|612|MH|||RC	Molecular Sequence Data|C0026382|981|MH|||RC
Deltaretrovirus Infections|C0020091|529|MH|||RC	Monkey Diseases|C0026431|981|MH|||RC
Gorilla gorilla|C0018090|460|MH|||RC	Macaca mulatta|C0024400|837|MH|||RC
DNA Primers|C0206416|421|MH|||RC	Base Sequence|C0004793|612|MH|||RC
Macaca nemestrina|C0024401|390|MH|||RC	Deltaretrovirus Infections|C0020091|529|MH|||RC
Primate Diseases|C0242634|353|MH|||RC	Gorilla gorilla|C0018090|460|MH|||RC
Simian Acquired Immunodeficiency Syndrome|C0080151|319|MH|||RC	DNA Primers|C0206416|421|MH|||RC
Polymerase Chain Reaction|C0032520|317|MH|||RC	Macaca nemestrina|C0024401|390|MH|||RC
Antigens, Viral|C0003342|313|MH|||RC	Primate Diseases|C0242634|353|MH|||RC
Genes, pol|C0017360|287|MH|||RC	Simian Acquired Immunodeficiency Syndrome|C0080151|319|MH|||RC
Phylogeny|C0031797|264|MH|||RC	Polymerase Chain Reaction|C0032520|317|MH|||RC
Antibodies, Viral|C0003253|259|MH|||RC	Antigens, Viral|C0003342|313|MH|||RC
Amino Acid Sequence|C0002518|239|MH|||RC	Genes, pol|C0017360|287|MH|||RC
	Phylogeny|C0031797|264|MH|||RC
	Antibodies, Viral|C0003253|259|MH|||RC
	Amino Acid Sequence|C0002518|239|MH|||RC

Decisions

Original String: **Macaca**
MetaMap Triggers: ["Macaque"-ab,"Macaques"-ab,"Macaques"-ti]
Replacing current term - Rule 3 (no Direct MetaMap MH found)
-- Replace with: Macaques
-- Alt. Replacement[0]: Macaque

Original String: **Spumavirus**
MetaMap Triggers: ["Simian Foamy Virus"-ab]:["Foamy Virus"-ab]
Replacing current term - Rule 3 (no Direct MetaMap MH found)
-- Replace with: Simian Foamy Virus
-- Alt. Replacement[1]: Foamy Virus

Original String: **Cercopithecus aethiops**
MetaMap Triggers: ["Monkey, African Green"-ab]
Replacing current term - Rule 3 (no Direct MetaMap MH found)
-- Replace with: Monkey, African Green

Original String: **Retroviridae**
MetaMap Triggers: ["Retroviral"-ti]
-- Retroviral (Title) [NOT a valid Entry Term]
Do nothing - 3) no Direct MetaMap MH found, no alternatives found!

Original String: **Papio**
MetaMap Triggers: ["Baboons"-ab]
Replacing current term - Rule 3 (no Direct MetaMap MH found)
-- Replace with: Baboons

Original String: **Retroviridae Infections**
-- Retroviral infection NOS (Abstract) [NOT a valid Entry Term]
Do nothing - 3) no Direct MetaMap MH found, no alternatives found!

Original String: **Pan troglodytes**
MetaMap Triggers: ["Chimpanzees"-ab]
Replacing current term - Rule 3 (no Direct MetaMap MH found)
-- Replace with: Chimpanzees

Original String: **Primates**
MetaMap Triggers: ["Primate, NOS"-ab]
-- Primate, NOS (Abstract) [NOT a valid Entry Term]
Do nothing - 3) no Direct MetaMap MH found, no alternatives found!

Appendix A – MTI Exceptions for Medium Filtering

strcheck A more general term can be a term of which the term to be acted upon is a sublist. (e.g., "Life" is more general than "Quality of Life" and "Quality of Life" is more specific than "Life"). Strcheck is not used when the difference in number of words is greater than 4, or on Heuristic #7.

0. When Surgery (MH) is in topN treat it as being E04 (*Surgical Procedures, Operative*) as well. (Add E04 to the tree code list for Surgery)

A. When a term is in E03 (*Anesthesia and Analgesia*), consider the term to be more specific than the top-level term in E02 (*Therapeutics*).

B. When a term is in E04 (*Surgical Procedures, Operative*) and not also in E01 (*Diagnosis*), consider the term to be more specific than the top-level term in E02 (*Therapeutics*).

C. When a term is in both E01 (*Diagnosis*) and E04 (*Surgical Procedures, Operative*), ignore any and all E04 tree numbers.

D. When a term is in both E01 (*Diagnosis*) and E05 (*Investigative Techniques*), ignore any and all E05 tree numbers.

E. When a term is in G01 (*Biological Sciences*) or G02 (*Health Occupations*), and also in some other subcategory, ignore any and all G01 and G02 tree numbers.

F. When a term is in E04 (*Surgical Procedures, Operative*), consider the term to be more specific than G02.403.810.762 (*Surgery*).

G. When a term has tree number G02.403.810.762 (*Surgery*) consider the term to be more specific than the top-level term in E02 (*Therapeutics*).

Appendix B – MTI Heuristics for Medium Filtering

- Heuristic #1 items to be exempted:
    a. If the same term has been assigned by both methods, keep it.
    b. Don't remove NMs
    c. Don't remove SHs
    d. Keep items in Z01 (*Geographics*) tree recommended by MetaMap
    e. Keep MH items in topN that are substitutes for SHs when recommended by MetaMap only
    f. When a term meets the following criteria, mark it as exempt:
        1. If we have any item in topN that is in range of D01-D25 AND NOT in range D26-D27 AND Recommended by both MM AND RC proceed,
        2. For each term in the topN AND in the range of D01-D25 AND in the range of D26-D27 AND not in any other categories outside of these Dnn categories AND is recommended by the RC path only, proceed for each term fitting this criteria,
        3. For each term, compile a list of all descendant terms in the topN that are in the range of D01-D27 AND NOT IN ANY other category including this term and find the highest scoring item in this pool of terms and mark it as exempt.
    g. Keep CT items recommended by MetaMap only.

- Heuristic #2: For removing terms when the method is MetaMap only. Remove terms resulting from Restrict to MeSH having no Semantic Type (ST) in common with the set of Semantic Types for the concepts that were recommended by MetaMap before Restrict to MeSH was run.

- Heuristic #3 is for removing terms when the method is Related Citations only. Remove the following:
    a. Check Tags
    b. Z01 (*Geographics*)

- Heuristic #4 is for removing terms when the method is Related Citations only. Remove any term in range D01 - D25 AND in range D26 - D27 AND NOT in any other categories AND when MetaMap hasn't recommended any term within range D01 - D25.

- Heuristic #5 is for removing terms when the method is MetaMap only. In any instance, when MM assigns a term which is more general or more specific OR RC assigns a term which is more specific, add the term to a collection of kept terms. When the collection is not empty, remove a term when it is not a member of the collection of kept terms AND the score for the term is lower than the lowest-scoring term in the collection of kept terms. The removal is not done unless the lowest_scoring term in the collection is less than 10,000.

- Heuristic #6 is for removing terms when only MetaMap recommends a term. In any instance, when both methods assign a more specific term, remove the term. **Note:** Uses Exceptions from above.

- Heuristic #7 is for removing terms when the method is Related Citations only. In every instance, when MetaMap assigns no term which is more general, remove the term. **Note:** Uses Exceptions from above.

- Heuristic #8 is for removing terms when the method is Related Citations only. In any instance, when both methods assign a more general term, remove the term. **Note:** Uses Exceptions from above.

- Heuristic #9 is for removing terms when only MetaMap recommends a term. In any instance, when there is no RC term from the same category, remove the term - provided the term is not in categories H or I.

- Heuristic #10 is for removing terms when the method is MetaMap only. Remove any term which is an NM when there are no terms that are a Heading Mapped-to (HM).

Appendix C – CheckTags (2006)

CUI	Mesh Heading
C0205653	Adolescent
C0001675	Adult
C0001792	Aged
C0003062	Animals
C0007450	Cats
C0007452	Cattle
C0008059	Child
C0012984	Dogs
C0015780	Female
C0018557	Cricetinae
C0020114	Humans
C0021270	Infant
C0021289	Infant, Newborn
C0021135	In Vitro
C0024554	Male
C0026809	Mice
C0032961	Pregnancy
C0034493	Rabbits
C0034721	Rats
C0036945	Sheep
C0039005	Swine
C0041703	United States
C0026438	Cercopithecus aethiops

NOTE: We are treating Sheep, Swine, Cercopithecus, and US as CheckTags when they really aren't, but, we are using the same process to identify them.

NOTE: 2006 Hamsters becomes Cricetinae and Hamsters is an Entry Term for Cricetinae

Appendix D – Bad CheckTags List (BadCTs)

CUI	MeSH Heading
C0007320	Case Reports [Publication Type]
C0009491	Comparative Study
C0014284	English Abstract
C0038850	Research Support, Non-U.S. Gov't
C0038851	Support, U.S. Gov't, Non-P.H.S.
C0038852	Support, U.S. Gov't, P.H.S.

Appendix E – SubHeadings (2006)

CUI	Mesh SubHeading
C0000769	abnormalities
C0001555	administration & dosage
C0001688	adverse effects
C0243192	agonists
C0002776	analogs & derivatives
C1524024	analysis
C0002809	anatomy & histology
C0003139	antagonists & inhibitors
C0005572	biosynthesis
C0005768	blood
C0005839	blood supply
C0007807	cerebrospinal fluid
C0007987	chemical synthesis
C0007994	chemically induced
C0079107	chemistry
C0008903	classification
C1171258	complications
C0009678	congenital
C0079164	contraindications
C0010820	cytology
C0011155	deficiency
C0348026	diagnosis
C0011933	diagnostic use
C0012160	diet therapy
C0728866	drug effects
C0013217	drug therapy
C0013557	economics
C0013621	education
C0013943	embryology
C0014445	enzymology
C0014508	epidemiology
C0015000	ethics
C0015033	ethnology
C0015127	etiology
C0017399	genetics
C1457898	growth & development
C0019665	history
C1522005	immunology
C1510467	injuries
C0021516	innervation
C0021632	instrumentation
C0022189	isolation & purification

CUI	Mesh SubHeading
C0023242	legislation & jurisprudence
C0024752	manpower
C0025520	metabolism
C0025664	methods
C0025953	microbiology
C0026566	mortality
C0028678	nursing
C0029236	organization & administration
C0205468	parasitology
C0030657	pathogenicity
C0205469	pathology
C0031328	pharmacokinetics
C1524059	pharmacology
C0031843	physiology
C0031847	physiopathology
C0032344	poisoning
C0033107	prevention & control
C1524060	psychology
C0034526	radiation effects
C0034571	radiography
C0034607	radionuclide imaging
C0034618	radiotherapy
C0034992	rehabilitation
C1522484	secondary
C0036536	secretion
C0038137	standards
C0038209	statistics & numerical data
C0038849	supply & distribution
C0038895	surgery
C0039795	therapeutic use
C0039798	therapy
C0040539	toxicity
C0040722	transmission
C0029216	transplantation
C0040833	trends
C0175676	ultrasonography
C0041623	ultrastructure
C0042037	urine
C0042153	utilization
C0042614	veterinary
C0205466	virology

Appendix F – Geographics Lookup & Substitution List (GEOs)

Town/City	Country Added
Dhaka	Bangladesh
Bangkok	Thailand
Chiang Rai	Thailand
Cape Town	South Africa
Carletonville	South Africa
Durban	South Africa
Gauteng	South Africa
Johannesburg	South Africa
Kwazulu-Natal	South Africa
Lusaka	Zambia
Ndola	Zambia
Harare	Zimbabwe
Yaounde	Cameroon
Bangui	Central African Republic
Katanga	Democratic Republic of Congo
Kinshasa	Democratic Republic of Congo
Mombasa	Kenya
Nairobi	Kenya
Nyanza Province	Kenya
Dar es Salaam	Tanzania
Kagera	Tanzania
Mwanza	Tanzania
Rakai	Uganda
Kampala	Uganda
Kigali	Rwanda
Abidjan	Cote d'Ivoire
Bouake	Cote d'Ivoire
Conakry	Guinea
Lagos	Nigeria
Dakar	Senegal
Cotonou	Benin
Guangxi	China
Shanghai	China
Yunnan	China
Manila	Philippines
Bangalore	India
Calcutta	India
Chennai	India
Karnataka	India
Madurai	India
Madras	India
Maharashtra	India
Manipur	India
Pune	India
Rajasthan	India
Addis Ababa	Ethiopia

Appendix G – MH/SH Lookup & Substitution List (MHSHs)

MH	SH
Abnormalities	abnormalities
Allergy and Immunology	immunology
Blood	blood
Blood Circulation	blood supply
Cerebrospinal Fluid	cerebrospinal fluid
Chemistry	chemistry
Chemistry, Analytical	analysis
Classification	classification
Cytology	cytology
Deficiency Diseases	deficiency
Diagnosis	diagnosis
Diet Therapy	diet therapy
Disease Transmission	transmission
Drug Therapy	drug therapy
Economics	economics
Education	education
Embryology	embryology
Enzymes	enzymology
Epidemiology	epidemiology
Equipment and Supplies	instrumentation
Ethnology	ethnology
Genetics	genetics
Health Manpower	manpower
History	history
Metabolism	metabolism
Methods	methods
Microbiology	microbiology
Mortality	mortality
Neoplasm Metastasis	secondary
Nursing	nursing
Nursing Care	nursing
Organization and Administration	organization & administration
Parasitology	parasitology
Pathology	pathology
Pharmacokinetics	pharmacokinetics
Pharmacology	pharmacology
Physiology	physiology
Poisoning	poisoning
Preventive Medicine	prevention & control
Psychology	psychology
Radiation Effects	radiation effects
Radiography	radiography
Radionuclide Imaging	radionuclide imaging
Radiotherapy	radiotherapy
Rehabilitation	rehabilitation
Statistics	statistics & numerical data
Surgery	surgery
Surgical Procedures, Operative	surgery
Therapeutics	therapy
Toxicology	toxicity
Transplantation	transplantation
Ultrasonography	ultrasonography
Urine	urine
Veterinary Medicine	veterinary
Virology	virology
Wounds and Injuries	injuries

Appendix H – MH Exclusion List (MH_Excludes)

MeSH Heading	Special
Abbreviations [Publication Type]	
Academic Dissertations [Publication Type]	
Account Books [Publication Type]	
Addresses [Publication Type]	
Advertisements [Publication Type]	
Age Groups	
Almanacs [Publication Type]	
Amino Acids, Peptides, and Proteins	
Analysis of Variance	X
Anecdotes [Publication Type]	
Anesthesia and Analgesia	
Animal Diseases	
Animal Structures	
Animals	
Animation [Publication Type]	
Annual Reports [Publication Type]	
Anti-Inflammatory Agents	
Antineoplastic Agents	
Architectural Drawings [Publication Type]	
Atlases [Publication Type]	
Bacterial Infections and Mycoses	
Behavior and Behavior Mechanisms	
Behavioral Disciplines and Activities	
Bibliography [Publication Type]	
Biobibliography [Publication Type]	
Biochemical Phenomena, Metabolism, and Nutrition	
Biography [Publication Type]	
Biological Phenomena, Cell Phenomena, and Immunity	
Biopharmaceutics	
Blood Chemical Analysis	
Blood Physiologic Phenomena	
Blood Physiologic Processes	
Bodily Secretions	X
Body Regions	
Body Temperature Changes	
Body Weight Changes	
Bones of Upper Extremity	
Book Illustrations [Publication Type]	
Book Reviews [Publication Type]	
Bookplates [Publication Type]	
Broadsides [Publication Type]	
Carbohydrate Conformation	
Carbohydrate Sequence	
Cardiovascular Physiologic Phenomena	
Cardiovascular Physiologic Processes	
Caricatures [Publication Type]	
Cartoons [Publication Type]	
Case Reports [Publication Type]	
Catalogs [Publication Type]	
Cations, Monovalent	
Causality	
Cell Membrane Structures	X
Cell Surface Extensions	X
Cells	
Cellular Structures	
Charts [Publication Type]	
Chemical Actions and Uses	
Chemical and Pharmacologic Phenomena	
Chromosome Structures	
Chromosomes, Human	
Chronology [Publication Type]	

MeSH Heading	Special
Circulatory and Respiratory Physiology	
Classical Article [Publication Type]	
Clinical Conference [Publication Type]	
Clinical Trial, Phase I [Publication Type]	
Clinical Trial, Phase II [Publication Type]	
Clinical Trial, Phase III [Publication Type]	
Clinical Trial, Phase IV [Publication Type]	
Cohort Effect	X
Collected Correspondence [Publication Type]	
Collected Works [Publication Type]	
Collections [Publication Type]	
Colloids	
Colorectal Surgery	X
Comment [Publication Type]	
Congenital, Hereditary, and Neonatal Diseases and Abnormalities	
Congresses [Publication Type]	
Consensus Development Conference [Publication Type]	
Consensus Development Conference, NIH [Publication Type]	
Controlled Clinical Trial [Publication Type]	
Corrected and Republished Article [Publication Type]	
Cytoplasmic Structures	X
Database [Publication Type]	
Dental Research	
Diagnostic Imaging	X
Diaries [Publication Type]	
Dictionary [Publication Type]	
Digestive, Oral, and Skin Physiology	
Directory [Publication Type]	
Disease Attributes	
Disorders of Environmental Origin	
Documentaries and Factual Films [Publication Type]	
Dosage Forms	X
Drawings [Publication Type]	
Drug Implants	
Duplicate Publication [Publication Type]	
Editorial [Publication Type]	
Embolism and Thrombosis	
Embryonic and Fetal Development	
Emulsions	
Encyclopedias [Publication Type]	
Endospore-Forming Bacteria	X
Environment and Public Health	
Enzyme Stability	
Enzymes and Coenzymes	
Ephemera [Publication Type]	
Epidemiologic Factors	X
Epidemiologic Methods	X
Epidemiologic Study Characteristics	
Epidermolysis Bullosa	X
Essays [Publication Type]	
Eulogies [Publication Type]	
Evaluation Studies [Publication Type]	
Examination Questions [Publication Type]	
Exhibitions [Publication Type]	
Eye Manifestations	
Female Genital Diseases and Pregnancy Complications	
Festschrift [Publication Type]	
Fictional Works [Publication Type]	

MeSH Heading	Special
Fluids and Secretions	
Food and Beverages	
Forms [Publication Type]	
Funeral Sermons [Publication Type]	
Fungi, Unclassified	X
Genes	
Genetic Phenomena	
Genetic Processes	
Genetic Structures	
Geographic Locations	
Government Publications [Publication Type]	
Gram-Negative Aerobic Bacteria	X
Gram-Negative Anaerobic Bacteria	X
Gram-Negative Anaerobic Cocci	X
Gram-Negative Anaerobic Straight, Curved, and Helical Rods	X
Gram-Negative Chemolithotrophic Bacteria	X
Gram-Positive Asporogenous Rods, Irregular	X
Gram-Positive Endospore-Forming Bacteria	X
Gram-Positive Endospore-Forming Rods	X
Gram-Positive Rods	X
Growth Substances	
Growth and Development	
Guidebooks [Publication Type]	
Handbooks [Publication Type]	
Health Care Economics and Organizations	
Health Care Evaluation Mechanisms	
Health Care Facilities, Manpower, and Services	
Health Care Quality, Access, and Evaluation	
Healthy Worker Effect	X
Hemic and Immune Systems	
Hemodynamic Phenomena	
Herbals [Publication Type]	
Historical Article [Publication Type]	
History, Early Modern 1451-1600	
History, Modern 1601-	
Hormones, Hormone Substitutes, and Hormone Antagonists	
Humor [Publication Type]	
Immunity, Active	
Immunity, Mucosal	
Immunity	
Immunologic Factors	
Indexes [Publication Type]	
Infant, Newborn, Diseases	X
Intervention Studies	
Interview [Publication Type]	
Intracranial Embolism and Thrombosis	
Investigative Techniques	
Ions	
Isomerases	
Jaw Abnormalities	X
Journal Article [Publication Type]	
Jurisprudence	
Juvenile Literature [Publication Type]	
Laboratory Manuals [Publication Type]	
Least-Squares Analysis	
Lecture Notes [Publication Type]	
Lectures [Publication Type]	
Legal Cases [Publication Type]	
Legislation [Publication Type]	
Letter [Publication Type]	
Mannich Bases	
Manuscripts [Publication Type]	
Maps [Publication Type]	

MeSH Heading	Special
Matched-Pair Analysis	X
Meeting Abstracts [Publication Type]	
Mental Disorders Diagnosed in Childhood	
Mercury Poisoning	X
Meta-Analysis [Publication Type]	
Microbiologic Phenomena	
Mind-Body and Relaxation Techniques	X
Molecular Mechanisms of Action	
Monitoring, Immunologic	X
Monograph [Publication Type]	
Mouth Rehabilitation	X
Multicenter Study [Publication Type]	
Multivariate Analysis	X
Musculoskeletal Physiologic Phenomena	
Musculoskeletal Physiologic Processes	
Musculoskeletal, Neural, and Ocular Physiology	
Neoplasms by Histologic Type	
Neoplasms by Site	
Neurobehavioral Manifestations	
Neurologic Manifestations	
Neuromuscular Manifestations	
Neurotransmitter Agents	
Nevi and Melanomas	
News [Publication Type]	
Newspaper Article [Publication Type]	
Normal Distribution	X
Nucleic Acid Denaturation	
Nucleic Acids, Nucleotides, and Nucleosides	
Nurses' Instruction [Publication Type]	
Nutritional and Metabolic Diseases	
Occupational Groups	
Ocular Physiologic Phenomena	
Ocular Physiologic Processes	
Ointment Bases	
Oral Manifestations	
Outlines [Publication Type]	
Overall [Publication Type]	
Patents [Publication Type]	
Pathologic Processes	
Pathological Conditions, Signs and Symptoms	
Patient Education Handout [Publication Type]	
Periodical Index [Publication Type]	
Periodicals [Publication Type]	
Personal Narratives [Publication Type]	
Persons	
Pharmaceutical Solutions	
Pharmacologic Actions	
Pharmacopoeias [Publication Type]	
Phrases [Publication Type]	
Physiological Effects of Drugs	
Pictorial Works [Publication Type]	
Plant Families and Groups	
Plants, Toxic	X
Popular Works [Publication Type]	
Population Characteristics	
Portraits [Publication Type]	
Posters [Publication Type]	
Powders	
Practice Guideline [Publication Type]	
Price Lists [Publication Type]	
Problems and Exercises [Publication Type]	
Programmed Instruction [Publication Type]	
Programs [Publication Type]	
Prospectuses [Publication Type]	
Protein Denaturation	

MeSH Heading	Special
Protein Isoforms	
Psychological Phenomena and Processes	
Publication Components [Publication Type]	
Publication Formats [Publication Type]	
Publications	
Published Erratum [Publication Type]	
Radioactive Tracers	
Radioactivity	
Random Allocation	**X**
Randomized Controlled Trial [Publication Type]	
Rehabilitation of Speech and Language Disorders	
Reproductive Techniques	**X**
Reproductive and Urinary Physiology	
Resource Guides [Publication Type]	
Respiratory Physiologic Phenomena	
Respiratory Physiologic Processes	
Retracted Publication [Publication Type]	
Retraction of Publication [Publication Type]	
Rickettsia Infections	**X**
Risk	
Schiff Bases	
Schizophrenia and Disorders with Psychotic Features	
Scientific Integrity Review [Publication Type]	
Sermons [Publication Type]	
Sexual and Gender Disorders	
Signs and Symptoms, Digestive	
Signs and Symptoms, Respiratory	
Signs and Symptoms	
Single-Blind Method	**X**
Skin Manifestations	
Skin and Connective Tissue Diseases	
Solutions	
Specialty Uses of Chemicals	
Statistics [Publication Type]	

MeSH Heading	Special
Study Characteristics [Publication Type]	
Support of Research	
Surgical Procedures, Minimally Invasive	
Surgical Procedures, Minor	**X**
Suspensions	
Tables [Publication Type]	
Tablets, Enteric-Coated	
Tablets	
Technical Report [Publication Type]	
Technology, Industry, and Agriculture	
Terminology [Publication Type]	
Textbooks [Publication Type]	
Therapeutic Uses	
Tissues	
Tooth Components	
Toxic Actions	
Twin Study [Publication Type]	
Unedited Footage [Publication Type]	
Union Lists [Publication Type]	
Unpublished Works [Publication Type]	
Urinary Tract Physiology	**X**
Urinary Tract	
Urologic and Male Genital Diseases	
Urological Manifestations	
Vaccines, Acellular	
Vaccines, Edible	
Vaccines, Marker	
Vaccines, Subunit	
Vaccines, Synthetic	
Vaccines, Virosome	
Validation Studies [Publication Type]	
Vertebrate Viruses	

Appendix I – UMLS Concepts to Exclude List (CUI_Excludes)

CUI	UMLS Concept
C0010957	Tissue damage
C0012634	Disease
C0015126	Etiologic agent not identified
C0026268	Mitral valve replacement NOS
C0030705	Patients
C0032782	Postnatal Care
C0076174	TEST Mixture
C0076833	container tops
C0150158	Cardiac care
C0150159	Cardiac care: acute
C0150195	Electrolyte management: hypercalcemia
C0150203	Electrolyte management: hyponatremia
C0150237	Fluid monitoring
C0150253	Hypervolemia management
C0150255	Hypothermia treatment
C0150310	Pregnancy termination care
C0184512	Stabilized
C0184513	Deteriorate
C0184796	Determination of outcome, complication avoidable, error in judgement
C0205082	Severe
C0205102	Intrinsic
C0205164	Major
C0205172	More
C0205173	Duplicate
C0205216	Decreased
C0205217	Increased
C0205225	Primary
C0205242	Cleaved
C0205246	Generalized
C0205276	Local
C0205307	Normal
C0205322	Persistent
C0205340	Repaired
C0205353	Habitual
C0205428	Involvements
C0205447	One
C0205449	Three
C0205450	Four
C0205451	Five
C0205452	Six
C0205453	Seven
C0205454	Eight
C0220806	Chemicals
C0220938	White color
C0225508	Structure of posterior epiglottis
C0225516	Postcricoid region
C0225567	Structure of hypopharyngeal aspect of aryepiglottic fold
C0225573	Infraglottic space
C0225574	Structure of supraglottic space
C0225824	Structure of subendocardial myocardium
C0227155	Posterior wall of oropharynx
C0227156	lateral wall of oropharynx
C0227157	Structure of vallecula of epiglottis
C0227160	Anterior surface of epiglottis
C0227170	Structure of piriform recess
C0227174	Posterior wall of hypopharynx
C0227175	Structure of junctional region with oropharynx
C0227345	Retrocecal tissue
C0229083	Structure of periorbital tissue
C0229423	Structure of mastoid cell

CUI	UMLS Concept
C0229569	Structure of periadrenal tissue
C0229872	Faucial pillar
C0229881	Tonsillar fossa
C0230082	Structure of soft tissues of head and neck
C0230124	Structure of soft tissues of perineum
C0230125	Structure of soft tissues of trunk
C0230146	Structure of soft tissues of thorax
C0230170	Structure of soft tissues of abdomen
C0230292	Structure of soft tissues of pelvis
C0230328	Structure of soft tissues of inguinal region
C0230336	Structure of axillary soft tissues
C0230410	Structure of soft tissues of upper extremity
C0230458	Structure of soft tissues of lower extremity
C0231290	After
C0232459	Abnormal digestive tract function
C0236102	BODY AS A WHOLE - GENERAL DISORDERS
C0237066	Anatomy/physiology
C0237067	Bronchial hygiene
C0237068	Caretaking/parenting skills
C0237069	Day care/respite
C0237070	Discipline
C0237071	Dressing change/wound care
C0237072	Feeding procedures
C0237074	Homemaking
C0237076	Lab findings
C0237078	Medical/dental care
C0237080	Medication set-up
C0237081	Mobility/transfers
C0237082	Nursing care, supplementary
C0237083	Nutritionist
C0237084	Other community resource
C0237085	Relaxation/breathing techniques
C0237086	Sleep/Rest
C0237087	Sickness/injury care
C0237088	Mental and Behavioral Signs and Symptoms
C0237089	Signs/symptoms - physical
C0237090	Social work/counseling
C0237092	Stimulation/nurturance
C0748877	Support system
C0237094	Other Intervention Target
C0238678	APICAL IMPULSE PALPABLE
C0238680	APICAL IMPULSE VISIBLE
C0238681	APICAL IMPULSE WEAKNESS
C0238682	APICAL RETRACTION, SYSTOLIC
C0262682	Cerebral perfusion promotion
C0262683	Circulatory care: mechanical assist device
C0262714	Medication administration: ventricular reservoir
C0278060	Mental state finding
C0279557	Adenosquamous cell lung cancer
C0332157	Exposure to
C0332197	Absent
C0332256	Containing
C0332257	Including
C0332282	Following
C0332285	Within
C0332289	Transmitted by
C0332437	Morphology
C0332447	Morphologically abnormal structure
C0332509	Increased size
C0332511	Decreased size
C0332514	Asymmetry
C0332526	Abnormal thickness

CUI	UMLS Concept
C0332596	Abnormal decrease in number
C0332850	Operative site
C0333044	Posterior displacement
C0333045	Superior displacement
C0333056	Protrusion
C0333117	Retention of content
C0337004	Hot weather
C0392767	Fragmented
C0429635	Fluid output
C0429636	Total fluid output
C0429638	Fluid output from drain
C0430007	Clinical investigation
C0436484	Echocardiogram normal
C0436539	Abnormal CT scan
C0438717	[D]Transaminase raised
C0439603	Frequencies (time pattern)
C0442805	Increase
C0455142	Intravenous therapy
C0489507	FLUID OUTPUT.GASTRIC TUBE
C0489508	FLUID OUTPUT.INSENSIBLE
C0489509	FLUID OUTPUT.MISC
C0508278	Administer insulin, as prescribed
C0513124	Monitor fluid balance
C0513154	Monitor for a widening or narrowing pulse pressure
C0513186	Monitor for bradycardia
C0513229	Monitor for digitalis toxicity (e.g., report serum levels above therapeutic range, monitor heart rate and rhythm before administering dose, and monitor for side effects), as appropriate
C0513465	Monitor hemodynamic response to the dysrhythmia
C0513483	Monitor intake/output, urine output, and daily weight, if appropriate
C0513484	Monitor intake/output, urine output, and patient weight, as appropriate
C0513526	Monitor maternal vital signs, as needed, based on amount of blood loss
C0513527	Monitor maternal vital signs, fetal heart rate, and uterine activity every 15 min during initiation of IV tocolysis
C0513689	Monitor pushing progress, fetal descent, fetal heart rate, and maternal vital signs, per protocol
C0513823	Monitor urine output every hour
C0513830	Monitor vital signs frequently
C0513832	Monitor vital signs per protocol or as needed
C0513952	Observe for indications of dehydration
C0514187	Perform a comprehensive urinary assessment focusing on causes of incontinence
C0515260	Record intake and output
C0515793	Set an appropriate intravenous infusion (or blood transfusion) flow rate
C0517203	24-hour intake and output balanced
C0518609	CONSIDERATION
C0518766	Vital signs
C0521361	Digestive structure
C0521620	Dilatation of ureter
C0544294	Technetium and technetium radioisotope
C0547047	Decrease
C0600140	Does run
C0682796	alcohol withdrawal agents
C0687676	After values
C0700148	Congestion
C0740265	Acid-base disorders
C0740273	Mixed acid-base disorders
C0740289	PO2 decreased
C0740299	Blood culture positive
C0740313	Nuclear magnetic resonance imaging abnormal

CUI	UMLS Concept
C0740321	Catheterisation cardiac abnormal
C0740334	Congenital hepatobiliary anomaly
C0740339	Throat cancer
C0740350	Anion gap normal
C0740406	Incarcerated hernia
C0740422	Fundus
C0740465	Holter monitoring abnormal
C0740466	Holter monitoring normal
C0740469	Increased albumin
C0861354	Infiltrating ductal breast cancer
C0740772	ADENOCARCINOMA SEROCYSTIC
C0740916	ALLERGY TO INSECT STING BEE
C0740972	ANAL CANCER SQUAMOUS CELL BIOPSIED
C0741177	AORTIC INSUFFICIENCY TRACE
C0741182	AORTIC STENOSIS MURMUR
C0741189	AORTIC VALVE REPLACEMENT STARR EDWARD
C0741190	AORTIC VALVE THICKENED
C0741210	ARRHYTHMIA INTRAPARTUM
C0741277	ATRIAL FIBRILLATION ASYMPTOMATIC
C0741280	ATRIAL FIBRILLATION ETIOLOGY UNKNOWN
C0741284	ATRIAL FIBRILLATION UNCONTROLLED
C0741287	ATRIAL FIBRILLATION VENTRICULAR RATE RAPID
C0741289	ATRIAL FLUTTER CHRONIC
C0741290	ATRIAL FLUTTER HIGH GRADE BLOCK
C0741291	ATRIAL FLUTTER NEW ONSET
C0741292	Paroxysmal atrial flutter
C0741295	ATRIAL FLUTTER VARIABLE CONDUCTION
C0741296	ATRIAL SEPTAL DEFECT OSTIUM PRIMUM
C0741298	ATRIAL TACHYCARDIA MULTIFOCAL NEW ONSET
C0005684	BLADDER CANCER MALIGNANT
C0741594	Abnormal Bone Marrow Test Result
C0741624	BRADYCARDIA ASYMPTOMATIC
C0741625	BRADYCARDIA EPISODE
C0741627	BRADYCARDIA SYMPTOMATIC
C0741674	BREAST CANCER DUCTAL CIS
C0741800	BRONCHOGENIC CANCER
C0741817	BUN MG DL CR MG DL
C0741819	BUNDLE BRANCH BLOCK LEFT ANTERIOR FASCICLE
C0741821	BUNDLE BRANCH BLOCK RATE_DEPENDENT
C0741822	BUNDLE BRANCH BLOCK TRIFASICULAR
C0741904	CARDIAC ARREST WITHOUT TRAUMA
C0741912	CARDIAC CLINIC DISMISSAL
C0741916	CARDIAC DEFECT
C0741918	CARDIAC DEFECT STRUCTURAL
C0741920	CARDIAC DISEASE RISK FACTOR
C0741929	anomaly; cardiac, septal closure
C0741931	Cardiac shadow enlarged
C0741936	CARDIAC VALVULAR INSUFFICIENCY
C0741937	CARDIAC WORKUP
C0741938	CARDIOLOGY CLINIC FOLLOW UP
C0741941	CARDIOMYOPATHY DECOMPENSATED
C0741943	CARDIOMYOPATHY DILATED END STAGE
C0741945	CARDIOMYOPATHY HYPERTENSIVE DILATED
C0741948	CARDIOVASCULAR EXAM ABNORMAL
C0742130	CERVICAL CANCER IN SITU CIN III
C0742133	CERVICAL CANCER SQUAMOUS CELL
C0742249	CHEMOTHERAPY CYCLOPHOSPHAMIDE
C0742479	CNS MALIGNANCY MENINGIOMA
C0742617	COLON PERIRECTAL ABSCESS

CUI	UMLS Concept
C0742637	COLON RECTAL CANCER DUKE STAGE STAGEVAL
C0742662	COLON RECTAL MASS
C0742665	COLON RECTAL PAIN
C0742680	COLON RECTAL STRICTURE
C0742683	COLON RECTAL ULCER
C0742747	CONGESTIVE HEART FAILURE HIGH OUTPUT
C0742749	CONGESTIVE HEART FAILURE LEFT SIDED
C0742754	CONGESTIVE HEART FAILURE RECURRENT
C0742755	CONGESTIVE HEART FAILURE RIGHT SIDED
C0742756	CONGESTIVE HEART FAILURE RIGHT SIDED RECURRENT
C0742775	CONTRACEPTION IUD INSERTION
C0742844	CORONARY STENOSIS LAD MIDDLE
C0742846	CORONARY STENOSIS RIGHT
C0742847	CORONARY STENOSIS RIGHT LUMINAL IRREGULARITIES
C0742850	CORONARY VENOGRAM
C0742859	COUGH CHRONIC PRODUCTIVE
C0742884	CRANIAL NERVE PALSY VII FACIAL
C0742908	CRYPTOCOCCAL ANTIGEN POSITIVE
C0742909	CRYPTOCOCCAL INFECTION DISSEMINATED
C0742912	CSF CRYPTOCOCCAL INFECTION
C0743009	DEFIBRILLATOR PLACEMENT AUTOMATIC TRANSVENOUS
C0743134	DIABETES MELLITUS PREGNANCY WHITE CLASS A2
C0743136	DIABETES MELLITUS PREGNANCY WHITE CLASS B
C0743158	DIALYSIS CAPD CATHETER TENCKHOFF
C0743161	DIALYSIS CAPD CATHETER TENCKHOFF PLACEMENT
C0743168	DIALYSIS PERITONEAL DIALYSIS
C0743190	DIARRHEA WITH HIV
C0743378	EAR VARICELLA ZOSTER
C0743498	ENDOCARDITIS BACTERIAL STAPH
C0743499	ENDOCARDITIS BACTERIAL STAPH AUREUS
C0743501	ENDOCARDITIS BACTERIAL SUSPECTED
C0743504	ENDOCARDITIS VALVULAR DYSFUNCTION
C0743511	ENDOMETRIAL CANCER ADENOCARCINOMA
C0743559	ERROR
C0743721	EYE MUSCLE WEAKNESS LATERAL RECTUS
C0743747	FACE ANGIOEDEMA
C0743808	FALLOPIAN TUBE LIGATION DESIRED
C0743812	FALLOPIAN TUBE LIGATION REVERSAL
C0743887	fracture; femur, head
C0743967	FETAL ULTRASOUND RESULT
C0743979	FEVER SUBJECTIVE
C0744096	FOOD ALLERGY TO SEAFOOD
C0744187	FORCEPS DELIVERY LOW OUTLET
C0744224	FRONTOETHMOID SINUSITIS
C0744342	GASTROSTOMY TUBE PEG PLACEMENT
C0744345	Placement of gastrostomy tube
C0744365	GENITAL HERPES SIMPLEX INFECTION
C0744418	GLOBULIN ELEVATED ELECTROPHORESIS GAMMA REGION
C0744607	HEAD INJURY GUNSHOT WOUND
C0744709	HEART VALVE REPLACEMENT DOUBLE
C0744832	HEPATITIS B CHRONIC CARRIER
C0744854	HEPATITIS ETIOLOGY UNKNOWN
C0745038	HOSPITALIZATION MULTIPLE
C0745106	HYPERPARATHYROID
C0745156	HYPOKINESIS GENERALIZED MODERATE

CUI	UMLS Concept
C0745157	HYPOKINESIS GLOBAL
C0745158	HYPOKINESIS INFERIOR
C0745196	HYSTERECTOMY ABDOMINAL WITH SALPINGO-OOPHORECTOMY
C0745202	HYSTERECTOMY PARTIAL WITHOUT SALPINGO-OOPHORECTOMY
C0745435	IV CATHETER HICKMAN PLACEMENT
C0745463	IV CATHETER PORTACATH PLACEMENT
C0745472	JAUNDICE PAINLESS
C0745592	LAB ERROR
C0745633	LANGUAGE BARRIER ENGLISH SPEAKING LIMITED
C0745660	LARYNGEAL CANCER SQUAMOUS CELL INVASIVE
C0745990	LUMBAR SPINAL CORD COMPRESSION
C0746365	MALARIA RELAPSE
C0746464	MEDICAL RECORD NOT AVAILABLE
C0746518	MENSES ABNORMAL HYPERMENORRHEA
C0746520	MENSES ABNORMAL IRREGULAR INTERVAL
C0746521	MENSES ABNORMAL MENOMETRORRHAGIA
C0746523	MENSES ABNORMAL MENORRHAGIA PREMENOPAUSE
C0746526	MENSES ABNORMAL METRORRHAGIA
C0746541	MENTAL STATUS ALTERED RESPONSIVENESS DECREASED
C0746592	MITRAL ANNULUS CALCIFICATION
C0746594	MITRAL LEAFLET FLAIL
C0746595	MITRAL REGURGITATION AND MITRAL STENOSIS
C0746599	MITRAL REGURGITATION PREDOMINANT
C0746600	MITRAL REGURGITATION UNSTABLE
C0746601	MITRAL STENOSIS MODERATE
C0746608	MITRAL VALVE PROSTHETIC MALFUNCTION
C0746655	MURMUR CONGENITAL
C0746669	Generalized muscle aches
C0746682	MUSCULOSKELETAL INJURY TRAUMA
C0746692	MYCOBACTERIUM AVIUM COMPLEX CULTURE POSITIVE
C0746715	MYOCARDIAL INFARCTION ANTEROSEPTAL MASSIVE
C0746719	MYOCARDIAL INFARCTION LOW SUSPICION
C0746723	MYOCARDIAL INFARCTION PERIOPERATIVE
C0746725	MYOCARDIAL INFARCTION RIGHT VENTRICULAR
C0746726	MYOCARDIAL INFARCTION RULED OUT
C0746733	MYOCARDIAL ISCHEMIA ANTEROAPICAL
C0746735	MYOCARDIAL ISCHEMIA INFRALATERAL
C0746737	MYOCARDIAL MICROINFARCTION
C0746757	NASAL CONGESTION CHRONIC
C0746800	NECK INJURY PUNCTURE WOUND
C0746853	NEUROENDOCRINE CELL CANCER INVASIVE
C0746883	Febrile neutropenia
C0746963	OB GYN
C0746989	OCCUPATIONAL RELATED DISORDER
C0747083	OTITIS CHRONIC
C0747122	PACEMAKER DDD
C0747142	PAIN CRISIS ACUTE
C0747169	PALPITATION NOT PRESENT
C0747307	PATIENT REPORT
C0747375	PELVIS BORDERLINE
C0747474	PERICARDIAL EFFUSION LARGE
C0747525	PERITONITIS BACTERIAL SUBACUTE

CUI	UMLS Concept
C0747636	PLEURAL EFFUSION CHRONIC
C0747679	PNEUMONIA EXTENT BILOBAR
C0747716	PO INTAKE FOOD DEFICIENT
C0748127	PULMONARY EMBOLUS INFARCTION
C0748128	PULMONARY EMBOLUS MULTIPLE
C0748155	PULMONARY INFILTRATE PATCHY
C0748217	QUADRIPLEGIA CERVICAL SPINE
C0748342	REPRODUCTIVE
C0748390	Retroperitoneal lymphadenopathy
C0748401	RH SENSITIZED
C0748429	RIGHT HEART ENDOCARDITIS
C0748430	RIGHT VENTRICULAR HYPERTENSION
C0748636	SHELTER PLACEMENT
C0748665	SHOULDER INJURY PENETRATING WOUND
C0748714	SINUS CANCER MALIGNANT
C0748728	SINUSITIS CLINICAL
C0748757	SKIN CANCER MALIGNANT MELANOMA END STAGE
C0748805	SKIN LESION JANEWAY
C0749002	STERILIZATION UNDER CONSIDERATION
C0749012	STEROID DEPENDENCY
C0749099	SUBENDOCARDIAL ISCHEMIA SILENT
C0749143	SULFAMETHOXAZOLE/TRIMETHOPRIM ADVERSE REACTION
C0749242	SYSTOLIC MURMUR NEW ONSET
C0749246	TACHYARRHYTHMIA PAROXYSMAL
C0749251	TACHYCARDIA WITH LIMITED EXERTION
C0749307	TETRALOGY FALLOT ACYANOTIC
C0749394	THROMBOCYTOPENIA HIV RELATED
C0749612	TRACHEAL SUBGLOTTIC STENOSIS
C0749626	TRANSFUSION BLOOD MULTIPLE
C0749888	URETER URINARY OBSTRUCTION
C0750194	Non-sustained ventricular tachycardia
C0750298	VOCAL CORD LESION BENIGN
C0750323	VOMIT INTRACTABLE
C0750466	Yeast infection
C0023311	Lens implant

Appendix J – New MeSH Headings List (NewTerms)

CUI	MeSH Heading
C0243546	1-Acylglycerol-3-Phosphate O-Acyltransferase
C0044620	1-Pyrroline-5-Carboxylate Dehydrogenase
C0045869	2-Aminoadipate Transaminase
C0046493	2-Oxoisovalerate Dehydrogenase (Acylating)
C0047442	3-Hydroxyanthranilate 3,4-Dioxygenase
C0047519	3-Isopropylmalate Dehydrogenase
C0243808	3-Phosphoshikimate 1-Carboxyvinyltransferase
C1563742	Abdominal Fat
C1306214	ACTH-Secreting Pituitary Adenoma
C0101367	Actin Capping Proteins
C0050633	Actin Depolymerizing Factors
C0676792	Actin-Related Protein 2
C1565319	Actin-Related Protein 2-3 Complex
C0676794	Actin-Related Protein 3
C0214635	Activating Transcription Factor 1
C1141625	Activating Transcription Factor 2
C0253596	Activating Transcription Factor 3
C0101379	Activating Transcription Factor 4
C1571641	Activating Transcription Factor 6
C1148798	Activating Transcription Factors
C0043626	Acyl-Carrier Protein S-Acetyltransferase
C0043627	Acyl-Carrier Protein S-Malonyltransferase
C1566416	ADAM Proteins
C0002448	Adamantinoma
C0596843	Adipogenesis
C0389071	Adiponectin
C0028754	Adiposity
C0686792	Adrenarche
C0051059	Alanine Dehydrogenase
C0108280	alpha Catenin
C0285890	alpha-Synuclein
C0320982	Amblyospora
C0051612	Amino-Acid N-Acetyltransferase
C1563701	Aminocoumarins
C0103013	Aminomethyltransferase
C0311612	Aminomuconate-Semialdehyde Dehydrogenase
C1563715	Andersen Syndrome
C1234164	Anellovirus
C1013340	Anodonta
C0081598	Antennapedia Homeodomain Protein
C1000918	Anthocerotophyta
C1563717	Antidiuretic Agents
C1457876	Antigens, CD146
C0081714	Antigens, CD147
C0916861	Antigens, CD164
C0054947	Antigens, CD22
C0054948	Antigens, CD24
C0075742	Antigens, CD38
C0074479	Antigens, CD43
C0285488	Antigens, CD46
C0220248	Antigens, CD47
C1533645	Antigens, CD79
C0527903	Antigens, CD86
C0382839	Antigens, CD94
C1567994	Antigens, Plant
C0003379	Antimitotic Agents
C0701858	Antiperspirants
C0763396	Apoptosis Inducing Factor
C1564881	Apoptosis Regulatory Proteins
C1567952	Aptamers, Nucleotide
C1567956	Aptamers, Peptide
C1565399	Aquaglyceroporins

CUI	MeSH Heading
C0109329	Aquaporin 1
C0213238	Aquaporin 2
C0256421	Aquaporin 3
C0292777	Aquaporin 4
C0388389	Aquaporin 5
C0753690	Aquaporin 6
C1448506	AraC Transcription Factor
C0998133	Arcidae
C0520509	Arm Bones
C1527440	Armadillo Domain Proteins
C0878486	Arteriolosclerosis
C1564657	Arthroplasty, Replacement, Finger
C0104203	Aryl Hydrocarbon Receptor Nuclear Translocator
C1564898	Atelidae
C0004153	Atherosclerosis
C1567976	Azulenes
C0167636	B-Cell-Specific Activator Protein
C0524737	Balaenoptera
C1456587	Bariatric Surgery
C1566543	Basic Helix-Loop-Helix Leucine Zipper Transcription Factors
C0288972	Basic Helix-Loop-Helix Transcription Factors
C1564867	Basic Reproduction Number
C0167220	Basic-Leucine Zipper Transcription Factors
C0296517	bcl-2 Homologous Antagonist-Killer Protein
C0219474	bcl-2-Associated X Protein
C0293686	bcl-Associated Death Protein
C0219472	bcl-X Protein
C1140552	Beluga Whale
C0053137	Benzaldehyde Dehydrogenase (NADP+)
C0081737	Benzoate 4-Monooxygenase
C1567756	Benzodioxoles
C1567965	Benzothiazoles
C1563847	Benzylammonium Compounds
C0105770	beta Catenin
C0053379	beta-Adrenergic Receptor Kinase
C0069468	beta-Alanine-Pyruvate Transaminase
C0053397	beta-Carotene 15,15'-Monooxygenase
C0245467	beta-Synuclein
C1564760	Betacyanins
C0053517	Betaine-Aldehyde Dehydrogenase
C0053518	Betaine-Homocysteine S-Methyltransferase
C0600766	Betalains
C1564763	Betaxanthins
C0531588	BH3 Interacting Domain Death Agonist Protein
C0542270	Bivalvia
C0424621	Body Fat Distribution
C1563726	Bone Density Conservation Agents
C0289417	Bone Morphogenetic Protein Receptors
C0289005	Bone Morphogenetic Protein Receptors, Type I
C0299048	Bone Morphogenetic Protein Receptors, Type II
C1563919	Bone-Patellar Tendon-Bone Graft
C0448188	Bones of Lower Extremity
C0325141	Bottle-Nosed Dolphin
C1001592	Bowhead Whale
C0524448	Bowman Capsule
C0229127	Bowman Membrane
C0006370	Bulimia Nervosa
C0263957	Bunion, Tailor's
C0286958	Butyrate Response Factor 1
C0223733	Capitate Bone
C0108273	CapZ Actin Capping Protein

CUI	MeSH Heading
C0302820	Carbohydrate Metabolism
C0453050	Cardiidae
C1262468	Carpal Joints
C0999519	Catarrhini
C0054859	Catechol 1,2-Dioxygenase
C0054860	Catechol 2,3-Dioxygenase
C0054862	Catecholamine Plasma Membrane Transport Proteins
C1564904	Catenins
C0379710	Caveolin 1
C0534858	Caveolin 2
C0386312	Caveolin 3
C0108969	CCAAT-Enhancer-Binding Protein-delta
C0054982	CDP-Diacylglycerol-Inositol 3-Phosphatidyltransferase
C0055061	Centromere Protein B
C0085988	Cephalopelvic Disproportion
C0324027	Cephalopoda
C0007937	Chalones
C1565234	Chemical Terrorism
C0055570	Choline Dehydrogenase
C1564655	Circulatory Arrest, Deep Hypothermia Induced
C1028738	Clione
C0055966	Clusterin
C1568397	Clutch Size
C1565230	Cofilin 1
C0968156	Cofilin 2
C1563921	Cold Ischemia
C0524553	Common Dolphins
C0540301	Complement C1 Inhibitor Protein
C0056174	Complement C2a
C0056175	Complement C2b
C1564374	Complement C3 Convertase, Alternative Pathway
C1564378	Complement C3 Convertase, Classical Pathway
C1564372	Complement C3-C5 Convertases
C1564373	Complement C3-C5 Convertases, Alternative Pathway
C1564377	Complement C3-C5 Convertases, Classical Pathway
C0056193	Complement C4b-Binding Protein
C1564375	Complement C5 Convertase, Alternative Pathway
C1564379	Complement C5 Convertase, Classical Pathway
C0056198	Complement C5b
C1564892	Complement Inactivating Agents
C0598489	Conus Snail
C1012293	Corbicula
C0539345	Core Binding Factor Alpha 1 Subunit
C0215508	Core Binding Factor Alpha 2 Subunit
C1097317	Core Binding Factor Alpha 3 Subunit
C0137833	Core Binding Factor alpha Subunits
C0285599	Core Binding Factor beta Subunit
C0212320	Core Binding Factors
C0215407	Cortactin
C0056426	COUP Transcription Factor I
C0081620	COUP Transcription Factor II
C1571530	COUP Transcription Factors
C0998142	Crassostrea
C0010289	Creatine Kinase, BB Form
C0010290	Creatine Kinase, MB Form
C0914594	Creatine Kinase, Mitochondrial Form
C0010291	Creatine Kinase, MM Form
C0256079	CREB-Binding Protein
C0961232	Crk-Associated Substrate Protein
C0010401	Cryoanesthesia
C0111043	Cyclic AMP Response Element Modulator

CUI	MeSH Heading
C0213709	Cyclic AMP Response Element-Binding Protein A
C0108855	Cyclin-Dependent Kinase 2
C0246957	Cyclin-Dependent Kinase 4
C0249586	Cyclin-Dependent Kinase 5
C0252132	Cyclin-Dependent Kinase 6
C0258920	Cyclin-Dependent Kinase Inhibitor p15
C0292198	Cyclin-Dependent Kinase Inhibitor p18
C1529962	Cyclin-Dependent Kinase Inhibitor p19
C0288472	Cyclin-Dependent Kinase Inhibitor p21
C0169665	Cyclin-Dependent Kinase Inhibitor p27
C0296845	Cyclin-Dependent Kinase Inhibitor p57
C0919418	Cyclin-Dependent Kinase Inhibitor Proteins
C0389003	Cyclooxygenase 1
C0387583	Cyclooxygenase 2
C1257954	Cyclooxygenase 2 Inhibitors
C0056872	Cysteine Dioxygenase
C0059563	Cytochrome P-450 CYP3A
C0082758	Cytokine Receptor gp130
C0057041	D-Alanine Transaminase
C0057047	D-Aspartate Oxidase
C0057072	D-Xylulose Reductase
C1228322	Decapodiformes
C1566590	Delayed Graft Function
C0259540	Delayed Rectifier Potassium Channels
C1563732	Dendrimers
C1565448	Dependent Ambulation
C0113214	Desmocollins
C0251058	Desmoglein 1
C0113218	Desmoglein 2
C0113222	Desmoglein 3
C0113216	Desmogleins
C0057555	Desmoplakins
C1564906	Desmosomal Cadherins
C0962546	Destrin
C0163260	Diacylglycerol O-Acyltransferase
C0259836	Diet, Carbohydrate-Restricted
C1384593	Digital Rectal Examination
C0058068	Dihydrodipicolinate Reductase
C0058087	Dihydrolipoyllysine-Residue Acetyltransferase
C0311627	Dihydrouracil Dehydrogenase (NAD+)
C0058266	Dimethylglycine Dehydrogenase
C1008936	Dipsacaceae
C1563696	DNA Repair-Deficiency Disorders
C0212694	DNA-Activated Protein Kinase
C0057146	Dopamine and cAMP-Regulated Phosphoprotein 32
C0114838	Dopamine Plasma Membrane Transport Proteins
C1012296	Dreissena
C0242339	Dyslipidemias
C1530358	E1A-Associated p300 Protein
C0146462	E2F Transcription Factors
C1384539	E2F1 Transcription Factor
C0249367	E2F2 Transcription Factor
C1529674	E2F3 Transcription Factor
C0291135	E2F4 Transcription Factor
C1529676	E2F5 Transcription Factor
C0672706	E2F6 Transcription Factor
C1529677	E2F7 Transcription Factor
C1566493	Early Growth Response Protein 1
C0064419	Early Growth Response Protein 2
C1571614	Early Growth Response Protein 3
C1566492	Early Growth Response Transcription Factors
C0682559	Elastic Cartilage
C1568245	Endocrine Disruptors

CUI	MeSH Heading
C0059367	Enoyl-(Acyl-Carrier Protein) Reductase (NADPH, B-Specific)
C0059366	Enoyl-(Acyl-Carrier-Protein) Reductase (NADH)
C0885305	Erigeron
C0059553	Erythroid-Specific DNA-Binding Factors
C0430701	Esophageal pH Monitoring
C1563386	Ether-A-Go-Go Potassium Channels
C0209089	ets-Domain Protein Elk-1
C0143466	ets-Domain Protein Elk-4
C0752946	Excitatory Amino Acid Transporter 3
C1564370	Excitatory Amino Acid Transporter 4
C1564371	Excitatory Amino Acid Transporter 5
C1568199	Fanconi Anemia Complementation Group A Protein
C0216736	Fanconi Anemia Complementation Group C Protein
C0965234	Fanconi Anemia Complementation Group D2 Protein
C1568213	Fanconi Anemia Complementation Group E Protein
C1568200	Fanconi Anemia Complementation Group F Protein
C0664903	Fanconi Anemia Complementation Group G Protein
C1568214	Fanconi Anemia Complementation Group L Protein
C1563385	Fanconi Anemia Complementation Group Proteins
C0210158	Farnesyltranstransferase
C0668194	Fatty Acid Transport Proteins
C0060095	Fatty Acid-Binding Proteins
C0060224	Ferredoxin-Nitrite Reductase
C0060274	Ferrosoferric Oxide
C1563784	Fibrin Modulating Agents
C0391318	Fibroblast Growth Factor 10
C0208989	Fibroblast Growth Factor 3
C0084220	Fibroblast Growth Factor 4
C0117720	Fibroblast Growth Factor 5
C1448584	Fibroblast Growth Factor 6
C0064294	Fibroblast Growth Factor 7
C0287829	Fibroblast Growth Factor 8
C0386595	Fibroblast Growth Factor 9
C0684077	Fibrocartilage
C0524744	Fin Whale
C0223792	Finger Phalanges
C0287186	fms-Like Tyrosine Kinase 3
C0059239	Focal Adhesion Kinase 1
C0380871	Focal Adhesion Kinase 2
C1565434	Focal Adhesion Protein-Tyrosine Kinases
C1008855	Fomites
C0118111	Forkhead Transcription Factors
C0218032	Fos-Related Antigen-2
C0016658	Fractures, Bone
C1564560	Fractures, Cartilage
C0521169	Fractures, Compression
C0118036	Fragile X Mental Retardation Protein
C0950122	Frasier Syndrome
C1564903	Frizzled Receptors
C1312159	Fushi Tarazu Transcription Factors
C1571679	G Protein-Coupled Inwardly-Rectifying Potassium Channels
C1563380	G-Box Binding Factors
C0118522	GA-Binding Protein Transcription Factor
C0060919	GABA Plasma Membrane Transport Proteins
C0137209	gamma Catenin
C0061031	gamma-Butyrobetaine Dioxygenase

CUI	MeSH Heading
C0753208	gamma-Synuclein
C0061093	Ganglioside Galactosyltransferase
C0868963	Gardening
C0017131	Gastric Hypothermia
C0324023	Gastropoda
C1564871	GATA Transcription Factors
C0118889	GATA1 Transcription Factor
C0118890	GATA2 Transcription Factor
C0118891	GATA3 Transcription Factor
C0214550	GATA4 Transcription Factor
C0259073	GATA5 Transcription Factor
C0259075	GATA6 Transcription Factor
C1565556	Gene Flow
C0178648	Gene Fusion
C0017340	Genes, Developmental
C0017351	Genes, Immunoglobulin Heavy Chain
C0017352	Genes, Immunoglobulin Light Chain
C1571444	Genes, Mating Type, Fungal
C1563761	Genes, Mitochondrial
C1567848	Genes, Neoplasm
C0678928	Genes, X-Linked
C0678929	Genes, Y-Linked
C1563751	Genetic Diseases, Y-Linked
C1563692	Genetic Speciation
C1563688	Genome, Helminth
C1563687	Genome, Insect
C0311907	Geranylgeranyl-Diphosphate Geranylgeranyltransferase
C0243650	Geranyltranstransferase
C0207072	Glial Cell Line-Derived Neurotrophic Factor
C0378357	Glial Cell Line-Derived Neurotrophic Factor Receptors
C1579754	Glial Cell Line-Derived Neurotrophic Factors
C0599297	Glomerular Basement Membrane
C1568869	Glucagon Precursors
C0061355	Glucagon-Like Peptide 1
C0030280	Glucagon-Secreting Cells
C0061395	Glucosamine 6-Phosphate N-Acetyltransferase
C0017742	Glucose Transport Proteins, Facilitative
C0168458	Glucose Transporter Type 1
C0174602	Glucose Transporter Type 2
C0119484	Glucose Transporter Type 3
C0166441	Glucose Transporter Type 4
C0172870	Glucose Transporter Type 5
C0061415	Glucose-1-Phosphate Adenylyltransferase
C0320984	Glugea
C0061462	Glutamate Formimidoyltransferase
C1564135	Glutamate Plasma Membrane Transport Proteins
C0311654	Glutamate Synthase (NADH)
C0061471	Glutamate-5-Semialdehyde Dehydrogenase
C0061510	Glutaryl-CoA Dehydrogenase
C0537086	Glutathione S-Transferase pi
C0061552	Glycerol-3-Phosphate Dehydrogenase (NAD+)
C1450945	Glycine Decarboxylase Complex
C0062056	Glycine Decarboxylase Complex H-Protein
C0061600	Glycine Dehydrogenase
C0082731	Glycine Dehydrogenase (Decarboxylating)
C0061604	Glycine N-Methyltransferase
C0061609	Glycine Plasma Membrane Transport Proteins
C0061598	Glycine Transaminase
C0878677	Glycogen Storage Disease Type IIb
C0596624	Glycogenolysis
C0061634	Glycolaldehyde Dehydrogenase
C0061778	GMP Reductase
C0120105	Goosecoid Protein

CUI	MeSH Heading
C0399496	Granulomatosis, Orofacial
C0339143	Graves Ophthalmopathy
C0296936	GRB10 Adaptor Protein
C0170953	GRB2 Adaptor Protein
C1534905	GRB7 Adaptor Protein
C0346302	Growth Hormone-Secreting Pituitary Adenoma
C0212766	GTP-Binding Protein alpha Subunit, Gi2
C0061949	Guanidinoacetate N-Methyltransferase
C1571481	Guanylate Cyclase-Activating Proteins
C0061991	Guanylate Kinase
C0546297	Hallux Varus
C0560737	Hamate Bone
C0448064	Hand Bones
C0459470	Hand Joints
C0677607	Hashimoto Disease
C1565106	Headache Disorders, Primary
C1565107	Headache Disorders, Secondary
C1564779	Heat-Shock Proteins, Small
C0538674	Heme Oxygenase-1
C0149707	Hemospermia
C0065110	Hepatocyte Nuclear Factor 1
C0209278	Hepatocyte Nuclear Factor 1-alpha
C0126037	Hepatocyte Nuclear Factor 1-beta
C0082859	Hepatocyte Nuclear Factor 3-alpha
C0121471	Hepatocyte Nuclear Factor 3-beta
C0121472	Hepatocyte Nuclear Factor 3-gamma
C0084821	Hepatocyte Nuclear Factor 4
C0529708	Hepatocyte Nuclear Factor 6
C0872184	Hepatocyte Nuclear Factors
C0266361	Hermaphroditism, True
C0596695	Hermissenda
C1001151	Hernandiaceae
C0019551	Hinge Exons
C0210947	Hippocalcin
C1509147	Histiocytoma
C0334463	Histiocytoma, Malignant Fibrous
C0062773	Histone Acetyltransferases
C0062934	Homocysteine S-Methyltransferase
C0062939	Homogentisate 1,2-Dioxygenase
C0062959	Homoserine O-Succinyltransferase
C0293226	Host Cell Factor C1
C0964863	HSC70 Heat-Shock Proteins
C0299173	HSP110 Heat-Shock Proteins
C1530436	HSP20 Heat-Shock Proteins
C1527498	HSP30 Heat-Shock Proteins
C0058610	HSP40 Heat-Shock Proteins
C0215739	HSP47 Heat-Shock Proteins
C0256926	HSP72 Heat-Shock Proteins
C0115654	Hu Paraneoplastic Encephalomyelitis Antigens
C1093046	Human papillomavirus 11
C0999806	Human papillomavirus 16
C0999807	Human papillomavirus 18
C1005556	Human papillomavirus 6
C0999577	Humpback Whale
C0225362	Hyaline Cartilage
C1399870	Hydrocolpos
C0293494	Hydrogensulfite Reductase
C0063193	Hydroxypyruvate Reductase
C0857007	Hyperbilirubinemia, Neonatal
C0221002	Hyperparathyroidism, Primary
C0342185	Hyperthyroxinemia, Familial Dysalbuminemic
C0215848	Hypoxia-Inducible Factor 1
C0965644	Hypoxia-Inducible Factor 1, alpha Subunit
C0663914	I-kappa B Kinase
C0174433	Ikaros Transcription Factor

CUI	MeSH Heading
C1563736	Imino Furanoses
C1563734	Imino Pyranoses
C1563733	Imino Sugars
C0139989	Immunoglobulin J Recombination Signal Sequence-Binding Protein
C1302674	Immunoglobulin Subunits
C1564138	Indoleamine-Pyrrole 2,3,-Dioxygenase
C0893445	Inhibitor of Apoptosis Proteins
C1571612	Inhibitor of Differentiation Protein 1
C1457879	Inhibitor of Differentiation Protein 2
C1566589	Inhibitor of Differentiation Proteins
C0067045	Inositol Oxygenase
C0030281	Insulin-Secreting Cells
C0063700	Interferon Regulatory Factor-1
C0063701	Interferon Regulatory Factor-2
C1510506	Interferon Regulatory Factor-3
C0666411	Interferon Regulatory Factor-7
C1564741	Interferon Regulatory Factors
C0083029	Interferon-Stimulated Gene Factor 3
C0643292	Interferon-Stimulated Gene Factor 3, alpha Subunit
C0378700	Interferon-Stimulated Gene Factor 3, gamma Subunit
C1571649	Intermediate-Conductance Calcium-Activated Potassium Channels
C1563739	Intra-Abdominal Fat
C1567880	Intracellular Calcium-Sensing Proteins
C1005888	Ipomoea nil
C1563704	Isocoumarins
C0064095	Isovaleryl-CoA Dehydrogenase
C0286983	Kangai-1 Protein
C1566141	KCNQ Potassium Channels
C0531002	KCNQ1 Potassium Channel
C0669669	KCNQ2 Potassium Channel
C0669672	KCNQ3 Potassium Channel
C0064319	Ketol-Acid Reductoisomerase
C0311245	Kidney Diseases, Cystic
C0022752	Knowledge Bases
C1506307	Kruppel-Like Transcription Factors
C1566012	Kv Channel-Interacting Proteins
C0294031	Kv1.1 Potassium Channel
C0297614	Kv1.2 Potassium Channel
C0290730	Kv1.3 Potassium Channel
C0299095	Kv1.4 Potassium Channel
C0295345	Kv1.5 Potassium Channel
C0528161	Kv1.6 Potassium Channel
C0064449	Kynurenine 3-Monooxygenase
C0064528	L-Amino Acid Oxidase
C0064529	L-Aminoadipate-Semialdehyde Dehydrogenase
C0064545	L-Gulonolactone Oxidase
C0065362	L-Lysine 6-Transaminase
C0317604	Lactobacillus brevis
C0317603	Lactobacillus fermentum
C0317592	Lactobacillus helveticus
C1260937	Lactobacillus leichmannii
C0317625	Lactobacillus reuteri
C0317597	Lactobacillus rhamnosus
C1530809	Large-Conductance Calcium-Activated Potassium Channel alpha Subunits
C1530810	Large-Conductance Calcium-Activated Potassium Channel beta Subunits
C0288250	Large-Conductance Calcium-Activated Potassium Channels
C0023334	Leontopithecus
C0064787	Leucine Dehydrogenase
C0064785	Leucine Transaminase

CUI	MeSH Heading
C0125575	Leucine-Responsive Regulatory Protein
C0065017	Linoleoyl-CoA Desaturase
C0598783	Lipid Metabolism
C1563744	Lipogenesis
C0302603	Liquid Crystals
C0075269	Lithostathine
C0481667	Live Birth
C0599467	Loligo
C1018105	Loma
C1527521	Lymphocyte Antigen 96
C0024291	Lymphohistiocytosis, Hemophagocytic
C0125440	Lymphoid Enhancer-Binding Factor 1
C0125271	Lysosomal-Associated Membrane Protein 1
C0125272	Lysosomal-Associated Membrane Protein 2
C0065401	Lysosome-Associated Membrane Glycoproteins
C0919482	Maf Transcription Factors
C1564870	Maf Transcription Factors, Large
C1564869	Maf Transcription Factors, Small
C1565054	MafB Transcription Factor
C1565056	MafF Transcription Factor
C1565055	MafG Transcription Factor
C0219484	MafK Transcription Factor
C0065559	Malate Dehydrogenase (NADP+)
C0065590	Malonate-Semialdehyde Dehydrogenase (Acetylating)
C0256616	Mannose-Binding Protein-Associated Serine Proteases
C1563825	Medical Order Entry Systems
C1564357	Membrane Fusion Proteins
C1563710	Membrane Transport Modulators
C0998165	Mercenaria
C0227651	Mesangial Cells
C1061676	Mesomycetozoea
C1564568	Mesomycetozoea Infections
C1563754	Metabolic Detoxication, Phase I
C1563755	Metabolic Detoxication, Phase II
C0025526	Metacarpal Bones
C0173924	Methyl-CpG-Binding Protein 2
C0066394	Methylmalonate-Semialdehyde Dehydrogenase (Acylating)
C0026809	Mice
C1563770	Microbial Viability
C0218694	Microphthalmia-Associated Transcription Factor
C0524751	Minke Whale
C0596952	Mitochondrial Membranes
C1563760	Mitosis Modulators
C1565249	Mobility Limitation
C0887866	Monckeberg Medial Calcific Sclerosis
C0026481	Monoglycerides
C1563382	MSX1 Transcription Factor
C0333355	Mucositis
C0524582	Mulibrey Nanism
C0649046	Munc18 Proteins
C1007978	Murinae
C1564140	Mutant Chimeric Proteins
C1564139	Mutant Proteins
C0129377	MutS DNA Mismatch-Binding Protein
C1571621	MutS Homolog 2 Protein
C0998170	Mya
C1571619	Myeloid-Lymphoid Leukemia Protein
C0067052	Myogenic Regulatory Factor 5
C0998129	Mytilidae
C0027144	Mytilus
C0446373	Mytilus edulis
C0243823	N-Acylsphingosine Galactosyltransferase

CUI	MeSH Heading
C0067966	N-Ethylmaleimide-Sensitive Proteins
C1328814	Nanomedicine
C0324028	Nautilus
C0032768	Neuralgia, Postherpetic
C0168770	Neurocalcin
C0071165	Neuroendocrine Secretory Protein 7B2
C0083727	Neurogranin
C0292991	Neuronal Apoptosis-Inhibitory Protein
C1565936	Neuronal Calcium-Sensor Proteins
C1564132	Neurotransmitter Transport Proteins
C0531925	Neurturin
C1531392	NF-E2 Transcription Factor
C1530722	NF-E2 Transcription Factor, p45 Subunit
C0249403	NF-E2-Related Factor 1
C0289507	NF-E2-Related Factor 2
C0132348	NF-kappa B p50 Subunit
C0905070	NF-kappa B p52 Subunit
C0213011	NFATC Transcription Factors
C0069116	NFI Transcription Factors
C0068704	Nicotinamide N-Methyltransferase
C0398791	Nijmegen Breakage Syndrome
C0068800	Nitrate Reductase
C0106262	Nitrate Reductase (NAD(P)H)
C0068803	Nitrate Reductase (NADH)
C0068804	Nitrate Reductase (NADPH)
C0669368	Nitric Oxide Synthase Type I
C1533698	Nitric Oxide Synthase Type II
C0907532	Nitric Oxide Synthase Type III
C0068815	Nitrite Reductase (NAD(P)H)
C0132800	Norepinephrine Plasma Membrane Transport Proteins
C0995555	Nostoc commune
C0995556	Nostoc muscorum
C1563691	Nuclear Export Signals
C0527520	Nuclear Factor 45 Protein
C1530014	Nuclear Factor 90 Proteins
C0538205	Nuclear Receptor Coactivator 2
C1565068	Nuclear Respiratory Factor 1
C0249404	Nuclear Respiratory Factors
C0069117	Octamer Transcription Factor-1
C1442823	Octamer Transcription Factor-2
C0083838	Octamer Transcription Factor-3
C0084485	Octamer Transcription Factor-6
C1564673	Octamer Transcription Factors
C1228323	Octopodiformes
C1458142	Odontogenic Tumor, Squamous
C0069416	Olfactory Marker Protein
C1564391	Oncogene Fusion
C0029011	Oncogene Protein tpr-met
C0133930	Oncogene Protein v-akt
C0069498	Oncogene Protein v-cbl
C0069499	Oncogene Protein v-crk
C1530729	Oncogene Protein v-maf
C1563738	Oncolytic Virotherapy
C0029020	Oncolytic Viruses
C1565907	Onecut Transcription Factors
C1564425	Organogold Compounds
C0288422	Origin Recognition Complex
C1568361	Orthodontic Anchorage Procedures
C0436040	Orthodontic Extrusion
C1082137	Ostrea
C1504775	Otx Transcription Factors
C0497406	Overweight
C1568405	Oviparity
C1568400	Ovoviviparity

CUI	MeSH Heading
C1564742	Oxidoreductases Acting on Aldehyde or Oxo Group Donors
C1564780	Oxidoreductases Acting on CH-NH2 Group Donors
C1564768	Oxidoreductases Acting on Sulfur Group Donors
C0256083	p300-CBP Transcription Factors
C1566488	Paired Box Transcription Factors
C1182634	Pancreatic Polypeptide-Secreting Cells
C0149521	Pancreatitis, Chronic
C0997845	Pansporablastina
C1564561	Papillomavirus E7 Proteins
C1399352	Paroxysmal Hemicrania
C0135572	PAX2 Transcription Factor
C0220416	PAX7 Transcription Factor
C1571472	PAX9 Transcription Factor
C0135575	Paxillin
C0998152	Pecten
C0998144	Pectinidae
C1007878	Perna
C1563753	Phenoxypropanolamines
C1563846	Phenylammonium Compounds
C0325143	Phocoena
C0070781	Phosphatidyl-N-Methylethanolamine N-Methyltransferase
C0070788	Phosphatidylethanolamine N-Methyltransferase
C0070861	Phosphoglycerate Dehydrogenase
C0250414	Phospholipase C gamma
C0070926	Phosphoribosylaminoimidazolecarboxamide Formyltransferase
C0070929	Phosphoribosylglycinamide Formyltransferase
C0250581	Phytochrome A
C0136976	Phytochrome B
C0068838	PII Nitrogen Regulatory Proteins
C1015328	Pinctada
C0223729	Pisiform Bone
C0071163	Pituitary Adenylate Cyclase-Activating Polypeptide
C1564905	Plakins
C1527504	Plakophilins
C1565660	Plant Infertility
C1564133	Plasma Membrane Neurotransmitter Transport Proteins
C0311705	Plastoquinol-Plastocyanin Reductase
C1135182	Platyrrhini
C0071277	Plectin
C1473312	Pleurobranchaea
C1328818	Podocytes
C0998200	Polyplacophora
C0751188	Post-Dural Puncture Headache
C0032816	Post-Traumatic Headache
C0271815	Postpartum Thyroiditis
C0173943	POU Domain Factors
C0072074	Profilins
C1563721	Protein Carbonylation
C1530216	Protein Inhibitors of Activated STAT
C0256371	Protein Kinase C-alpha
C0217250	Protein Kinase C-delta
C0257694	Protein Kinase C-epsilon
C0377914	Proto-Oncogene Protein c-ets-1
C0072462	Proto-Oncogene Protein c-ets-2
C0215060	Proto-Oncogene Protein c-fli-1
C0164786	Proto-Oncogene Proteins c-akt
C0248007	Proto-Oncogene Proteins c-bcl-6
C0072449	Proto-Oncogene Proteins c-bcr
C0139026	Proto-Oncogene Proteins c-cbl
C0084216	Proto-Oncogene Proteins c-crk

CUI	MeSH Heading
C0072461	Proto-Oncogene Proteins c-ets
C0072463	Proto-Oncogene Proteins c-fes
C0072475	Proto-Oncogene Proteins c-fyn
C0286943	Proto-Oncogene Proteins c-hck
C0252023	Proto-Oncogene Proteins c-maf
C0127306	Proto-Oncogene Proteins c-mdm2
C0072476	Proto-Oncogene Proteins c-pim-1
C0072479	Proto-Oncogene Proteins c-ret
C0139040	Proto-Oncogene Proteins c-vav
C0072456	Proto-Oncogene Proteins c-yes
C0072500	Protoporphyrinogen Oxidase
C1530899	PTEN Phosphohydrolase
C0072798	Pyruvate Synthase
C1564495	Q-SNARE Proteins
C0288881	Qa-SNARE Proteins
C1564496	Qb-SNARE Proteins
C1564497	Qc-SNARE Proteins
C0224440	Quadriceps Muscle
C1564498	R-SNARE Proteins
C0287666	Rad51 Recombinase
C0220050	Rad52 DNA Repair and Recombination Protein
C1512814	Radiotherapy, Intensity-Modulated
C0317983	Ralstonia pickettii
C0034721	Rats
C0170936	Receptor, Fibroblast Growth Factor, Type 1
C0209706	Receptor, Fibroblast Growth Factor, Type 2
C0117718	Receptor, Fibroblast Growth Factor, Type 3
C0117719	Receptor, Fibroblast Growth Factor, Type 4
C0967028	Receptor, Fibroblast Growth Factor, Type 5
C0144507	Receptor, Notch1
C0295924	Receptor, Notch2
C0082341	Receptors, Dopamine D3
C0114835	Receptors, Dopamine D4
C0114836	Receptors, Dopamine D5
C1564522	Receptors, Guanylate Cyclase-Coupled
C0065744	Receptors, Mating Factor
C0083792	Receptors, Notch
C0536243	Receptors, Oxidized LDL
C1564907	Receptors, Pattern Recognition
C0084056	Receptors, Pituitary Adenylate Cyclase-Activating Polypeptide
C0904504	Receptors, Pituitary Adenylate Cyclase-Activating Polypeptide, Type I
C0074129	Receptors, Scavenger
C1527495	Receptors, Vasoactive Intestinal Peptide, Type II
C1527494	Receptors, Vasoactive Intestinal Polypeptide, Type I
C0140116	Recoverin
C1564097	Regulatory Elements, Transcriptional
C1565489	Renal Insufficiency
C1565662	Renal Insufficiency, Acute
C0403447	Renal Insufficiency, Chronic
C0165675	Replication Factor A
C0166886	Replication Factor C
C1567329	Research Support, N.I.H., Extramural
C1567328	Research Support, N.I.H., Intramural
C0963992	Resistin
C1564995	Retinal Bipolar Cells
C0073099	Retinal Dehydrogenase
C1565000	Retinal Horizontal Cells
C0599575	Retinoblastoma-Like Protein p107
C1529719	Retinoblastoma-Like Protein p130
C0073112	Retinol O-Fatty-Acyltransferase
C0073209	Rhodopsin Kinase
C0084410	RNA Polymerase Sigma 54

CUI	MeSH Heading
C1080890	Salacia
C0074059	Sarcosine Dehydrogenase
C0074062	Sarcosine Oxidase
C0998139	Scapharca
C1530903	Scavenger Receptors, Class A
C1530904	Scavenger Receptors, Class B
C1530905	Scavenger Receptors, Class C
C1530906	Scavenger Receptors, Class D
C1530907	Scavenger Receptors, Class E
C1530908	Scavenger Receptors, Class F
C1527491	Selenium-Binding Proteins
C0141947	Selenoprotein P
C1531114	Selenoprotein R
C1531110	Selenoprotein W
C0074302	Selenoproteins
C1567938	SELEX Aptamer Technique
C0598107	Sepia
C0074375	Serine C-Palmitoyltransferase
C0074366	Serine O-Acetyltransferase
C0170657	Serotonin Plasma Membrane Transport Proteins
C0330741	Sesbania
C0084533	Sex-Determining Region Y Protein
C0242341	Sexual Infantilism
C1566224	Shab Potassium Channels
C1566112	Shaker Superfamily of Potassium Channels
C0378533	Shal Potassium Channels
C0391360	Shaw Potassium Channels
C0074477	Sialomucins
C1571580	Smad Proteins
C1325343	Smad Proteins, Inhibitory
C1566788	Smad Proteins, Receptor-Regulated
C1566789	Smad1 Protein
C0528860	Smad2 Protein
C0529120	Smad3 Protein
C1566805	Smad4 Protein
C0529859	Smad5 Protein
C1533654	Smad6 Protein
C0664910	Smad7 Protein
C1566814	Smad8 Protein
C1571638	Small-Conductance Calcium-Activated Potassium Channels
C0300824	SNARE Proteins
C1563711	Sodium Chloride Symporter Inhibitors
C0074782	Sodium Chloride Symporters
C1563713	Sodium Potassium Chloride Symporter Inhibitors
C0017739	Sodium-Glucose Transport Proteins
C0248805	Sodium-Glucose Transporter 1
C1565154	Sodium-Glucose Transporter 2
C0074787	Sodium-Phosphate Cotransporter Proteins
C1529326	Sodium-Phosphate Cotransporter Proteins, Type I
C0629781	Sodium-Phosphate Cotransporter Proteins, Type II
C1529423	Sodium-Phosphate Cotransporter Proteins, Type IIa
C1529424	Sodium-Phosphate Cotransporter Proteins, Type IIb
C1529425	Sodium-Phosphate Cotransporter Proteins, Type IIc
C0961545	Sodium-Phosphate Cotransporter Proteins, Type III
C0169272	Soluble N-Ethylmaleimide-Sensitive Factor Attachment Proteins
C1566330	Sp Transcription Factors
C0654051	Sp2 Transcription Factor
C0172659	Sp3 Transcription Factor
C0390479	Sp4 Transcription Factor
C0524760	Sperm Whale

CUI	MeSH Heading
C0143252	Sphingosine N-Acyltransferase
C0998156	Spisula
C0597505	Split-Brain Procedure
C0075086	Squalene Monooxygenase
C1564654	STAT Transcription Factors
C0287920	STAT1 Transcription Factor
C0295166	STAT2 Transcription Factor
C0253050	STAT3 Transcription Factor
C0255034	STAT4 Transcription Factor
C1121634	STAT5 Transcription Factor
C0297893	STAT6 Transcription Factor
C0075189	Stathmin
C0320127	Stenella
C0217529	Sterol Regulatory Element Binding Protein 1
C0250036	Sterol Regulatory Element Binding Protein 2
C1566548	Sterol Regulatory Element Binding Proteins
C0595939	Stillbirth
C0222331	Subcutaneous Fat
C1563741	Subcutaneous Fat, Abdominal
C0075426	Succinate-Semialdehyde Dehydrogenase
C0075427	Succinate-Semialdehyde Dehydrogenase (NADP+)
C0762034	Succinyldiaminopimelate Transaminase
C0084679	Sulfite Dehydrogenase
C0038748	Sulfite Oxidase
C0075550	Sulfite Reductase (Ferredoxin)
C0075551	Sulfite Reductase (NADPH)
C1262087	SUNCT Syndrome
C1568415	Support of Research
C1564682	Suppressor of Cytokine Signaling Proteins
C0075689	Synaptosomal-Associated Protein 25
C0144255	Synaptotagmin I
C0287221	Synaptotagmin II
C0084697	Synaptotagmins
C0287682	Syntaxin 1
C0671360	Syntaxin 16
C0165073	Synucleins
C0084726	T Cell Transcription Factor 1
C0039198	T-Lymphocytes, Regulatory
C0999500	Tarsii
C1566664	TCF Transcription Factors
C1568272	Tendinopathy
C1564656	Ternary Complex Factors
C0320988	Thelohania
C0541746	Thiazides
C1563716	Thyroid Dysgenesis
C0584876	Toe Phalanges
C0971363	Toll-Like Receptor 1
C1531274	Toll-Like Receptor 10
C0754728	Toll-Like Receptor 2
C1313494	Toll-Like Receptor 3
C1321919	Toll-Like Receptor 4
C0966553	Toll-Like Receptor 5
C0768454	Toll-Like Receptor 6
C0971207	Toll-Like Receptor 7
C0962444	Toll-Like Receptor 8
C0963057	Toll-Like Receptor 9
C0670896	Toll-Like Receptors
C0076897	Trans-Cinnamate 4-Monooxygenase
C0436548	Transcranial Magnetic Stimulation
C0059296	Transcription Factor AP-2
C0173933	Transcription Factor Brn-3
C0173931	Transcription Factor Brn-3A
C0173932	Transcription Factor Brn-3B
C0753633	Transcription Factor Brn-3C

CUI	MeSH Heading
C0287750	Transcription Factor CHOP
C0534164	Transcription Factor DP1
C0084828	Transcription Factor Pit-1
C0214222	Transcription Factor RelA
C0167957	Transcription Factor RelB
C0172237	Transcription Factor TFIIH
C1563722	Transient Receptor Potential Channels
C0223736	Trapezium Bone
C0223741	Trapezoid Bone
C0447834	Triangular Fibrocartilage
C1565172	Trigeminal Autonomic Cephalalgias
C1563845	Trimethyl Ammonium Compounds
C0223739	Triquetrum Bone
C0084795	Tristetraprolin
C1563693	Tritonia Sea Slug
C0147029	Tropomodulin
C1563723	TRPC Cation Channels
C1563724	TRPM Cation Channels
C1153432	TRPP Cation Channels
C0108303	TRPV Cation Channels
C0077438	Tryptophan Transaminase
C1563757	Tubulin Modulators
C0077529	Twist Transcription Factor
C1019016	Unio
C1013339	Unionidae
C0076925	Upstream Stimulatory Factors
C0077845	Uracil-DNA Glycosidase
C0524639	Urofollitropin
C0271097	Usher Syndromes
C0042266	Vaginismus
C0245866	Valine Dehydrogenase (NADP+)
C1564098	VDJ Exons
C0148339	Vesicle-Associated Membrane Protein 1
C0148340	Vesicle-Associated Membrane Protein 2
C0218159	Vesicle-Associated Membrane Protein 3
C0169582	Vesicular Acetylcholine Transport Proteins

CUI	MeSH Heading
C0173611	Vesicular Biogenic Amine Transport Proteins
C0969320	Vesicular Glutamate Transport Protein 1
C0969321	Vesicular Glutamate Transport Protein 2
C1564137	Vesicular Glutamate Transport Proteins
C1564136	Vesicular Inhibitory Amino Acid Transport Proteins
C1529240	Vesicular Monoamine Transport Proteins
C1564134	Vesicular Neurotransmitter Transport Proteins
C1196682	Vetiveria
C1568403	Viviparity, Nonmammalian
C0753015	Voltage-Dependent Anion Channel 1
C0753016	Voltage-Dependent Anion Channel 2
C1506024	Voltage-Dependent Anion Channels
C1566585	Von Hippel-Lindau Tumor Suppressor Protein
C0272414	Wandering Spleen
C1567664	Warm Ischemia
C1475787	Wautersia
C0995158	Whale, Killer
C0325139	Whales, Pilot
C0043152	White Heifer Disease
C0203669	Whole Body Imaging
C1565824	Winged-Helix Transcription Factors
C0258432	Wiskott-Aldrich Syndrome Protein
C1565167	Wiskott-Aldrich Syndrome Protein Family
C0531254	Wiskott-Aldrich Syndrome Protein, Neuronal
C0753137	Wnt Proteins
C0072467	Wnt1 Protein
C0164801	Wnt2 Protein
C0043297	X Chromosome Inactivation
C0528561	X-Linked Inhibitor of Apoptosis Protein
C0085030	Xeroderma Pigmentosum Group A Protein
C0168553	Xeroderma Pigmentosum Group D Protein
C0377707	Y-Box-Binding Protein 1
C0903890	YY1 Transcription Factor
C0246976	ZAP-70 Protein-Tyrosine Kinase

Appendix K – Additional US Triggers List (USAtriggers)

CUI	UMLS Concept
C0002455	American Cancer Society
C0002456	American Dental Association
C0002458	American Heart Association
C0002459	American Hospital Association
C0002461	American Medical Association
C0002463	American Nurses' Association
C0007670	Centers for Disease Control and Prevention (U.S.)
C0009434	Commission on Professional and Hospital Activities
C0018727	Health Planning
C0018763	Health Systems Agencies
C0018764	Health Systems Plans
C0020007	Hospitals, Federal
C0020012	Hospitals, Military
C0022405	Joint Commission on Accreditation of Healthcare Organizations
C0027446	National Academy of Sciences (U.S.)
C0027447	National Center for Health Care Technology
C0027450	National Center for Health Statistics (U.S.)
C0027454	National Health Insurance, United States
C0027456	National Health Planning Information Center
C0027463	National Institute for Occupational Safety and Health
C0027466	National Institute of Mental Health (U.S.)
C0027468	National Institutes of Health (U.S.)
C0027470	National Library of Medicine (U.S.)
C0038192	State Health Planning and Development Agencies
C0038194	State Health Plans
C0041704	United States Substance Abuse and Mental Health Services Administration
C0041711	United States Dept. of Health and Human Services
C0041712	United States Environmental Protection Agency
C0041713	United States Federal Trade Commission
C0041714	United States Food and Drug Administration
C0041718	United States Centers for Medicare and Medicaid Services
C0041720	United States Health Resources and Services Administration
C0041731	United States Occupational Safety and Health Administration
C0041732	United States Office of Economic Opportunity
C0041733	United States Office of Technology Assessment
C0041734	United States Public Health Service
C0041735	United States Department of Veterans Affairs
C0021621	Institute of Medicine (U.S.)
C0078936	American Speech-Language-Hearing Association
C0080268	United States Agency for Healthcare Research and Quality
C0085141	United States Indian Health Service
C0085291	National Practitioner Data Bank
C0085410	United States Department of Agriculture
C0206601	United States Office of Research Integrity
C0242776	United States National Aeronautics and Space Administration
C0282680	United States Social Security Administration
C0376631	Employee Retirement Income Security Act
C0600418	Patient Self-Determination Act
C0600593	Health Insurance Portability and Accountability Act

Appendix L – Lookup Lists

Adolescent (50):

1) C1137103 - Abandoned Adolescent
2) C1137103 - Abandoned Adolescents
3) C0001578 - Adolescence
4) C0205653 - Adolescent
5) C0001580 - Adolescent Behavior
6) C0001580 - Adolescent Behaviors
7) C0085100 - Adolescent Health Services
8) C0162630 - Adolescent Nutrition
9) C0162630 - Adolescent Nutritions
10) C1137103 - Adolescent, Abandoned
11) C0001588 - Adolescent, Female
12) C1138477 - Adolescent, Gifted
13) C0001585 - Adolescent, Hospitalized
14) C0001586 - Adolescent, Institutionalized
15) C0001589 - Adolescent, Male
16) C0205653 - Adolescents
17) C1137103 - Adolescents, Abandoned
18) C0001588 - Adolescents, Female
19) C1138477 - Adolescents, Gifted
20) C0001585 - Adolescents, Hospitalized
21) C0001586 - Adolescents, Institutionalized
22) C0001589 - Adolescents, Male
23) C0001580 - Behavior, Adolescent
24) C0001580 - Behaviors, Adolescent
25) C0870101 - Development, Adolescent
26) C0001588 - Female Adolescent
27) C0001588 - Female Adolescents
28) C1138477 - Gifted Adolescent
29) C1138477 - Gifted Adolescents
30) C0085100 - Health Service, Adolescent
31) C0085100 - Health Services, Adolescent
32) C0001585 - Hospitalized Adolescent
33) C0001585 - Hospitalized Adolescents
34) C0001586 - Institutionalized Adolescent
35) C0001586 - Institutionalized Adolescents
36) C0001589 - Male Adolescent
37) C0001589 - Male Adolescents
38) C0001581 - Medicine, Adolescent
39) C0162630 - Nutrition, Adolescent
40) C0162630 - Nutritions, Adolescent
41) C0032968 - Pregnancy in Adolescence
42) C0001583 - Psychiatry, Adolescent
43) C0001584 - Psychology, Adolescent
44) C0085100 - Service, Adolescent Health
45) C0085100 - Services, Adolescent Health
46) C0001578 - Teen-age
47) C0001578 - teenage
48) TxLookup - teenaged
49) TxLookup - teenager
50) C0087178 - Youths

Adolescent Trees (2):

1) M01.060.057 - Adolescent
2) F01.145.022 - Adolescent Behavior

Adult (1):

1) C0001675 - Adult

Aged (11):

1) C0001795 - Aged, 80 and over
2) C0007667 - Centenarian
3) C0079204 - Dental Care for Aged
4) C0013772 - Elder Abuse
5) C0001792 - Elderly
6) C0079377 - Frail Elderly
7) C0018753 - Health Services for the Aged
8) C0019870 - Homes for the Aged
9) C0028296 - Nonagenarian
10) C0028829 - Octogenarian
11) C0001795 - Oldest Old

Aged Trees (1):

1) M01.060.116.100 - Aged

Animals (813):

1) C0085087 - 3T3 Cells
2) C0000780 - Abomasum
3) C0000823 - Abortion, Veterinary
4) C0034698 - ACI Rat
5) C0034698 - ACI Rat, Inbred
6) C0034698 - ACI Rats
7) C0034698 - ACI Rats, Inbred
8) C0001247 - Actinobacillosis
9) C0001748 - African Horse Sickness
10) C0001752 - African Swine Fever
11) C1022239 - Agapornis
12) C0001878 - Air Sacs
13) C0025918 - AKR Mice
14) C0025918 - AKR Mice, Inbred
15) C0025918 - AKR Mouse
16) C0025918 - AKR Mouse, Inbred
17) C0002016 - Aleutian Mink Disease
18) C0002757 - Anal Gland Neoplasms
19) C0002759 - Anal Sacs
20) C0002797 - Anaplasmosis
21) C0003046 - Animal Communication
22) C0003047 - Animal Diseases
23) C1257925 - Animal Mammary Carcinoma
24) C1257925 - Animal Mammary Carcinomas
25) C0024659 - Animal Mammary Gland
26) C0024659 - Animal Mammary Glands
27) C0024667 - Animal Mammary Neoplasm
28) C0024667 - Animal Mammary Neoplasms
29) C0003054 - Animal Nutrition
30) C0029954 - animal Oviduct
31) C0003065 - Animals, Newborn
32) C0325486 - Anseriformes
33) C0003452 - Antlers
34) C0242635 - Ape Diseases
35) C0025932 - Athymic Mice
36) C0025932 - Athymic Mouse
37) C0034713 - Athymic Rat
38) C0034713 - Athymic Rats
39) C0524710 - August Rat
40) C0524710 - August Rats
41) C0010352 - Avian crop
42) C0016627 - Avian Flu
43) C0016627 - Avian Influenza
44) C0016627 - Avian Influenzas
45) C0004421 - Avian Leukosis
46) C0004576 - Babesiosis
47) C0025919 - BALB C Mice
48) C0025919 - BALB C Mice, Inbred
49) C0025919 - BALB C Mouse
50) C0025919 - BALB C Mouse, Inbred
51) C0034699 - BB Rat
52) C0034699 - BB Rat, Inbred
53) C0034699 - BB Rats
54) C0034699 - BB Rats, Inbred
55) C0034699 - BB Wistar Rats
56) C0004895 - Beak
57) C0004935 - Behavior, Animal
58) C0019861 - Behavior, Homing
59) C0019861 - Behaviors, Homing
60) C0004949 - Belgian Hare
61) C0034699 - Bio Breeding Inbred Rats
62) C0034699 - Bio-Breeding Inbred Rat
63) C0034699 - Bio-Breeding Inbred Rats
64) C1136222 - Biozzi Mice
65) C0005591 - Bird Diseases
66) C0016627 - Bird Flu
67) C0005866 - Bluetongue
68) C0034700 - BN Rat
69) C0034700 - BN Rat, Inbred
70) C0034700 - BN Rats
71) C0034700 - BN Rats, Inbred
72) C0006008 - Border Disease
73) C0006023 - Borna Disease
74) C0007452 - Bovine
75) C0002797 - Bovine Anaplasmosis
76) C0032291 - Bovine atypical interstitial pneumonia
77) C0302363 - Bovine brucellosis
78) C1449809 - Bovine Respiratory Disease Complex
79) C0006075 - Bovine Virus Diarrhea-Mucosal Disease
80) C0034694 - Brattleboro Rats
81) C0302363 - Brucellosis, Bovine
82) C0034701 - BUF Rat
83) C0034701 - BUF Rat, Inbred
84) C0034701 - BUF Rats
85) C0034701 - BUF Rats, Inbred
86) C0034701 - Buffalo Rats, Inbred
87) C0006440 - Bursa of Fabricius
88) C0025920 - C3H Mice
89) C0025920 - C3H Mice, Inbred
90) C0025920 - C3H Mouse
91) C0025920 - C3H Mouse, Inbred
92) C0025921 - C57BL Mice
93) C0025921 - C57BL Mice, Inbred
94) C0025921 - C57BL Mouse
95) C0025921 - C57BL Mouse, Inbred
96) C0524515 - Canidae
97) C0012979 - Canine Diseases
98) C0012984 - Canis familiaris
99) C0007098 - Carcinoma 256, Walker
100) C1257925 - Carcinoma, Animal Mammary
101) C0007122 - Carcinoma, Brown-Pearce
102) C0007125 - Carcinoma, Ehrlich Tumor
103) C0007128 - Carcinoma, Krebs 2
104) C0243038 - Carcinoma, Lewis Lung
105) C1257925 - Carcinomas, Animal Mammary
106) C0007288 - Carpus, Animal
107) C0007450 - Cat
108) C0007350 - Cat Diseases
109) C0007450 - Cat, Domestic
110) C0007450 - Cats, Domestic
111) C0007452 - Cattle
112) C0007453 - Cattle Diseases
113) C0085979 - Cavia
114) C0018382 - Caviidae
115) C0025922 - CBA Mice
116) C0025922 - CBA Mice, Inbred
117) C0025922 - CBA Mouse
118) C0025922 - CBA Mouse, Inbred
119) C0034703 - CDF Rat, Inbred
120) C0034703 - CDF Rats, Inbred
121) C0206610 - CFTR Mice
122) C0206610 - CFTR Mice, Inbred
123) C0206610 - CFTR Mouse
124) C0206610 - CFTR Mouse, Inbred
125) C0325773 - Charadriiformes
126) C0008046 - Chick Embryo
127) C0085080 - Chinese hamster ovary cell
128) C0018555 - Chinese Hamsters
129) C0085080 - CHO Cells
130) C0019841 - Cholera, Hog
131) C0600547 - Cinnamon Rats, Long-Evans
132) C0019841 - Classical Swine Fever
133) C0325905 - Columbiformes
134) C0009424 - Comb and Wattles
135) C0600530 - Congenic Mice
136) C0009990 - Copulation
137) C0010085 - Corpora Allata
138) C0376702 - COS Cells

Animals continued:

139) C0018557 - Cricetinae
140) C0010321 - Cricetus
141) C0010352 - Crop, Avian
142) C0010418 - Cryptosporidiosis
143) C0600534 - Dahl Hypertensive Rats
144) C0600533 - Dahl Rats
145) C0600533 - Dahl Rats, Inbred
146) C0600535 - Dahl Salt Resistant Rats
147) C0600534 - Dahl Salt Sensitive Rats
148) C0600535 - Dahl Salt-Resistant Rats
149) C0600534 - Dahl Salt-Sensitive Rats
150) C0025923 - DBA Mice
151) C0025923 - DBA Mice, Inbred
152) C0025923 - DBA Mouse
153) C0025923 - DBA Mouse, Inbred
154) C0011853 - Diabetes Mellitus, Experimental
155) C0085243 - Diabetic Mice, Non-Obese
156) C0085243 - Diabetic Mice, Nonobese
157) C0085243 - Diabetic Mouse, Non-Obese
158) C0085243 - Diabetic Mouse, Nonobese
159) C0012118 - Dictyocaulus Infections
160) C0086150 - Didelphis
161) C0012602 - Dirofilariasis
162) C0012754 - Distemper
163) C0012984 - Dog
164) C0012979 - Dog Diseases
165) C0007450 - Domestic Cat
166) C0007450 - Domestic Cats
167) C0034493 - Domestic Rabbit
168) C0034493 - Domestic Rabbits
169) C0751318 - domesticus, Mus
170) C0751318 - domesticus, Mus musculus
171) C0013076 - Dourine
172) C0013529 - Echolocation
173) C0013570 - Ecthyma, Contagious
174) C0013591 - Ectromelia, Infectious
175) C0013605 - Edema Disease of Swine
176) C0013702 - Egg Shell
177) C0013782 - Electric Organ
178) C0013897 - Eliminative Behavior, Animal
179) C0013940 - Embryo, Nonmammalian
180) C0014073 - Encephalomyelitis, Enzootic Porcine
181) C0085209 - Encephalopathy, Bovine Spongiform
182) C0014342 - Enteritis, Transmissible, of Turkeys
183) C0014371 - Enterotoxemia
184) C0085165 - Enzootic bovine leukosis
185) C0014481 - Ephemeral Fever
186) C0014521 - Epidermitis, Exudative, of Swine
187) C0014661 - Equine Infectious Anemia
188) C0014736 - Erysipelothrix infection
189) C0014736 - Erysipelothrix Infections
190) C0324537 - Evans Rats, Long
191) C0034703 - F344 Rat
192) C0034703 - F344 Rat, Inbred
193) C0034703 - F344 Rats
194) C0034703 - F344 Rats, Inbred
195) C0999241 - Falconiformes
196) C0012984 - familiaris, Canis
197) C0015655 - Fascioloidiasis
198) C0015665 - Fat Body
199) C0600548 - Fatty Rats, Otsuka-Long-Evans-Tokushima
200) C0015731 - Feathers
201) C0325089 - feline
202) C0079335 - Feline Acquired Immunodeficiency Syndrome
203) C0007350 - Feline Disease
204) C0085306 - Feline infectious peritonitis
205) C0015765 - Feline Panleukopenia
206) C0524517 - Felis
207) C0007450 - Felis catus
208) C0007450 - Felis domestica
209) C0007450 - Felis domesticus
210) C0007450 - Felis sylvestris catus
211) C0034703 - Fischer Rats
212) C0016154 - Fish Diseases
213) C0016627 - Flu, Avian
214) C0016627 - Flu, Bird
215) C0016513 - Foot Rot
216) C0016514 - Foot-and-Mouth Disease
217) C0016555 - Forelimb
218) C1450009 - Founder Mice, Transgenic
219) C0016627 - Fowl Plague
220) C0016629 - Fowlpox
221) C0016697 - Freemartinism
222) C0328422 - Gadiformes
223) C0328433 - Gadus morhua
224) C0325589 - Galliformes
225) C0017162 - Gastroenteritis, Transmissible, of Swine
226) C0017558 - Gills
227) C0017589 - Glanders
228) C0018018 - Goat Diseases
229) C0018249 - Grooming
230) C0518461 - Grooming self-care
231) C0085979 - Guinea Pigs
232) C0034696 - Gunn Rats
233) C0025924 - Hairless Mice
234) C0025924 - Hairless Mouse
235) C0018557 - Hamster
236) C0018555 - Hamsters, Chinese
237) C0018597 - Harderian Gland
238) C0004949 - Hare, Belgian
239) C0018835 - Heartwater Disease
240) C0018891 - Helminthiasis, Animal
241) C0019051 - Hemolymph
242) C0019188 - Hepatitis, Animal
243) C0019191 - Hepatitis, Infectious Canine
244) C0019194 - Hepatitis, Viral, Animal
245) C0023216 - Hindlimb
246) C0019556 - Hip Dysplasia, Canine
247) C0019841 - Hog Cholera
248) C0242589 - Holtzman Rats
249) C0600243 - Home Range
250) C0600243 - Home Ranges
251) C0019861 - Homing Behavior
252) C0019861 - Homing Behaviors
253) C0019909 - Hoof and Claw
254) C0019939 - Horns
255) C0019940 - Horse Diseases
256) C0025914 - House Mice
257) C0025914 - House Mouse
258) C0025924 - HRS Mice
259) C0025924 - HRS Mice, Inbred
260) C0025924 - HRS Mouse
261) C0025924 - HRS Mouse, Inbred
262) C0524519 - Hyaenidae
263) C0162418 - Hyperglycemic Mice
264) C0162418 - Hyperglycemic Mouse
265) C0600534 - Hypertensive Rats, Dahl
266) C0025925 - ICR Mice
267) C0025925 - ICR Mice, Inbred
268) C0025925 - ICR Mouse
269) C0025925 - ICR Mouse, Inbred
270) C0524641 - ICRC Mice, Inbred
271) C0524641 - ICRC Mouse, Inbred
272) C0085112 - Immunodeficient Mice, Severe Combined
273) C0025917 - Inbred A Mice
274) C0025917 - Inbred A Mouse
275) C0034698 - Inbred ACI Rat
276) C0034698 - Inbred ACI Rats
277) C0025918 - Inbred AKR Mice

Animals continued:

278) C0025918 - Inbred AKR Mouse
279) C0025919 - Inbred BALB C Mice
280) C0025919 - Inbred BALB C Mouse
281) C0034699 - Inbred BB Rat
282) C0034699 - Inbred BB Rats
283) C0034700 - Inbred BN Rat
284) C0034700 - Inbred BN Rats
285) C0034701 - Inbred BUF Rat
286) C0034701 - Inbred BUF Rats
287) C0034701 - Inbred Buffalo Rats
288) C0025920 - Inbred C3H Mice
289) C0025920 - Inbred C3H Mouse
290) C0025921 - Inbred C57BL Mice
291) C0025921 - Inbred C57BL Mouse
292) C0025922 - Inbred CBA Mice
293) C0025922 - Inbred CBA Mouse
294) C0034703 - Inbred CDF Rat
295) C0034703 - Inbred CDF Rats
296) C0206610 - Inbred CFTR Mice
297) C0206610 - Inbred CFTR Mouse
298) C0600533 - Inbred Dahl Rats
299) C0025923 - Inbred DBA Mice
300) C0025923 - Inbred DBA Mouse
301) C0034703 - Inbred F344 Rat
302) C0034703 - Inbred F344 Rats
303) C0025924 - Inbred HRS Mice
304) C0025924 - Inbred HRS Mouse
305) C0025925 - Inbred ICR Mice
306) C0025925 - Inbred ICR Mouse
307) C0524641 - Inbred ICRC Mice
308) C0524641 - Inbred ICRC Mouse
309) C0600547 - Inbred LEC Rat
310) C0600547 - Inbred LEC Rats
311) C0034704 - Inbred Lew Rat
312) C0034704 - Inbred Lew Rats
313) C0034704 - Inbred Lewis Rats
314) C0206535 - Inbred mdx Mice
315) C0206535 - Inbred mdx Mouse
316) C0025927 - Inbred Mouse Strain
317) C0025927 - Inbred Mouse Strains
318) C0085243 - Inbred NOD Mice
319) C0085243 - Inbred NOD Mouse
320) C0025926 - Inbred NZB Mice
321) C0025926 - Inbred NZB Mouse
322) C0600548 - Inbred OLETF Rat
323) C0600548 - Inbred OLETF Rats
324) C0034706 - Inbred Rat Strain
325) C0034706 - Inbred Rat Strains
326) C0034699 - Inbred Rat, Bio-Breeding
327) C0034699 - Inbred Rats, Bio-Breeding
328) C0242854 - Inbred SENCAR Mice
329) C0242854 - Inbred SENCAR Mouse
330) C0034705 - Inbred SHR Rat
331) C0034705 - Inbred SHR Rats
332) C0025927 - Inbred Strain of Mice
333) C0025927 - Inbred Strain of Mouse
334) C0034706 - Inbred Strain of Rat
335) C0034706 - Inbred Strain of Rats
336) C0034706 - Inbred Strain Rat
337) C0034706 - Inbred Strain Rats
338) C0025927 - Inbred Strains of Mice
339) C0034706 - Inbred Strains of Rats
340) C0034706 - Inbred Strains Rat
341) C0034706 - Inbred Strains Rats
342) C0034707 - Inbred WF Rat
343) C0034707 - Inbred WF Rats
344) C0034709 - Inbred WKY Rat
345) C0034709 - Inbred WKY Rats
346) C0021334 - Infectious Bovine Rhinotracheitis
347) C0016627 - Influenza, Avian
348) C0016627 - Influenzas, Avian
349) C0021800 - Interrenal Gland
350) C0025928 - Jimpy Mice
351) C0022576 - Keratoconjunctivitis, Infectious
352) C0022742 - Knee
353) C0206745 - Knock-out Mice
354) C0206745 - Knockout Mice
355) C0206745 - Knockout Mouse
356) C0022827 - L Cells (Cell Line)
357) C0025929 - Laboratory Mice
358) C0025929 - Laboratory Mouse
359) C0086893 - Laboratory Rat
360) C0086893 - Laboratory Rats
361) C0022976 - Lameness, Animal
362) C0600547 - LEC Rat, Inbred
363) C0600547 - LEC Rats, Inbred
364) C0023420 - Leukemia L1210
365) C0023421 - Leukemia L5178
366) C0023429 - Leukemia P388
367) C0085164 - Leukemia, Feline
368) C0034704 - Lew Rat
369) C0034704 - Lew Rat, Inbred
370) C0034704 - Lew Rats
371) C0034704 - Lew Rats, Inbred
372) C0034704 - Lewis Rats, Inbred
373) C0023904 - Liver Neoplasms, Experimental
374) C0242598 - LLC-PK1 Cells
375) C0600547 - Long Evans Cinnamon Rats
376) C0324537 - Long Evans Rats
377) C0600547 - Long-Evans Cinnamon Rats
378) C0324537 - Long-Evans Rats
379) C0024003 - Lordosis
380) C0024025 - Louping Ill
381) C0376632 - lpr Mice, MRL
382) C0376632 - lpr Mouse, MRL
383) C0024106 - Lumpy Skin Disease
384) C0024148 - Lurcher Mice
385) C0024148 - Lurcher Mouse
386) C0024533 - Malaria, Avian
387) C0024587 - Malignant Catarrh
388) C0024648 - Malpighian Tubules
389) C0024659 - Mammae
390) C1257925 - Mammary Carcinoma, Animal
391) C1257925 - Mammary Carcinomas, Animal
392) C0024659 - Mammary Gland, Animal
393) C0024659 - Mammary Glands, Animal
394) C0024667 - Mammary Neoplasm
395) C0024667 - Mammary Neoplasm, Animal
396) C0024667 - Mammary Neoplasms
397) C0024668 - Mammary Neoplasms, Experimental
398) C0024788 - Marburg Virus Disease
399) C0024793 - Marek Disease
400) C0024895 - Mastitis, Bovine
401) C0206535 - mdx Mice
402) C0206535 - mdx Mice, Inbred
403) C0206535 - mdx Mouse
404) C0206535 - mdx Mouse, Inbred
405) C0006345 - Melopsittacus
406) C0025864 - Metrial Gland
407) C0025914 - Mice
408) C0026200 - Mice Minute Viruses
409) C0025930 - Mice Mutant Strain
410) C0025930 - Mice Mutant Strains
411) C0025918 - Mice, AKR
412) C0025932 - Mice, Athymic
413) C0025919 - Mice, BALB C
414) C0025920 - Mice, C3H
415) C0025921 - Mice, C57BL
416) C0025922 - Mice, CBA

Animals continued:

417) C0206610 - Mice, CFTR
418) C0025923 - Mice, DBA
419) C0025924 - Mice, Hairless
420) C0025914 - Mice, House
421) C0025924 - Mice, HRS
422) C0162418 - Mice, Hyperglycemic
423) C0025925 - Mice, ICR
424) C0524641 - Mice, Inbred ICRC
425) C0206745 - Mice, Knock out
426) C0206745 - Mice, Knock-out
427) C0025929 - Mice, Laboratory
428) C0024148 - Mice, Lurcher
429) C0206535 - Mice, mdx
430) C0376632 - Mice, MRL lpr
431) C0027762 - Mice, Nervous
432) C0025931 - Mice, Neurologic Mutant
433) C0025931 - Mice, Neurological Mutants
434) C0085243 - Mice, NOD
435) C0085243 - Mice, Non-Obese Diabetic
436) C0085243 - Mice, Nonobese Diabetic
437) C0025926 - Mice, NZB
438) C0034921 - Mice, Reeler
439) C0086962 - Mice, SCID-hu
440) C0242854 - Mice, SENCAR
441) C0038125 - Mice, Staggerer
442) C0162416 - Mice, Swiss
443) C1450009 - Mice, Transgenic Founder
444) C0043086 - Mice, Weaver
445) C0025938 - Micelle
446) C0026200 - Minute Virus of Mice
447) C0026200 - Minute Virus, Mice
448) C0026200 - Minute Viruses, Mice
449) C0026414 - Monieziasis
450) C0026431 - Monkey Diseases
451) C0242413 - Monodelphis
452) C0025914 - Mouse
453) C0025927 - Mouse Inbred Strain
454) C0025927 - Mouse Inbred Strains
455) C0025930 - Mouse Mutant Strain
456) C0025930 - Mouse Mutant Strains
457) C0025927 - Mouse Strain, Inbred
458) C0025930 - Mouse Strain, Mutant
459) C0025927 - Mouse Strains, Inbred
460) C0025930 - Mouse Strains, Mutant
461) C0025918 - Mouse, AKR
462) C0025932 - Mouse, Athymic
463) C0025919 - Mouse, BALB C
464) C0025920 - Mouse, C3H
465) C0025921 - Mouse, C57BL
466) C0025922 - Mouse, CBA
467) C0206610 - Mouse, CFTR
468) C0025923 - Mouse, DBA
469) C1450009 - Mouse, Founder, Transgenic
470) C0025924 - Mouse, Hairless
471) C0025914 - Mouse, House
472) C0025924 - Mouse, HRS
473) C0162418 - Mouse, Hyperglycemic
474) C0025925 - Mouse, ICR
475) C0025917 - Mouse, Inbred A
476) C0025918 - Mouse, Inbred AKR
477) C0025919 - Mouse, Inbred BALB C
478) C0025920 - Mouse, Inbred C3H
479) C0025921 - Mouse, Inbred C57BL
480) C0025922 - Mouse, Inbred CBA
481) C0206610 - Mouse, Inbred CFTR
482) C0025923 - Mouse, Inbred DBA
483) C0025924 - Mouse, Inbred HRS
484) C0025925 - Mouse, Inbred ICR
485) C0524641 - Mouse, Inbred ICRC
486) C0206535 - Mouse, Inbred mdx
487) C0376632 - Mouse, Inbred MRL lpr
488) C0085243 - Mouse, Inbred NOD
489) C0025926 - Mouse, Inbred NZB
490) C0242854 - Mouse, Inbred SENCAR
491) C0025927 - Mouse, Inbred Strain
492) C0206745 - Mouse, Knockout
493) C0025929 - Mouse, Laboratory
494) C0024148 - Mouse, Lurcher
495) C0206535 - Mouse, mdx
496) C0376632 - Mouse, MRL lpr
497) C0025930 - Mouse, Mutant Strain
498) C0027762 - Mouse, Nervous
499) C0025931 - Mouse, Neurologic Mutant
500) C0025931 - Mouse, Neurological Mutant
501) C0085243 - Mouse, NOD
502) C0085243 - Mouse, Non-Obese Diabetic
503) C0085243 - Mouse, Nonobese Diabetic
504) C0025932 - Mouse, Nude
505) C0025926 - Mouse, NZB
506) C0025933 - Mouse, Obese
507) C0034921 - Mouse, Reeler
508) C0085112 - Mouse, SCID
509) C0086962 - Mouse, SCID hu
510) C0086962 - Mouse, SCID-hu
511) C0242854 - Mouse, SENCAR
512) C0038125 - Mouse, Staggerer
513) C0162416 - Mouse, Swiss
514) C0025936 - Mouse, Transgenic
515) C0043086 - Mouse, Weaver
516) C0376632 - MRL lpr Mice
517) C0376632 - MRL lpr Mouse
518) C0079864 - Murine Acquired Immunodeficiency Syndrome
519) C0019185 - Murine hepatitis virus
520) C0026809 - Mus
521) C0751318 - Mus domesticus
522) C0025914 - Mus musculus
523) C0751318 - Mus musculus domesticus
524) C0026851 - Muscular Dystrophy, Animal
525) C0751318 - musculus domesticus, Mus
526) C0325034 - Mustelidae
527) C0025931 - Mutant Mice, Neurologic
528) C0025930 - Mutant Mouse Strain
529) C0025930 - Mutant Mouse Strains
530) C0025931 - Mutant Mouse, Neurologic
531) C0025930 - Mutant Strain Mouse
532) C0025930 - Mutant Strain of Mouse
533) C0025930 - Mutant Strains Mice
534) C0025930 - Mutant Strains of Mice
535) C0034711 - Mutant Strains Rat
536) C0034711 - Mutant Strains Rats
537) C0027132 - Myoxidae
538) C0027152 - Myxomatosis, Infectious
539) C0027345 - Nairobi Sheep Disease
540) C0024667 - Neoplasm, Animal Mammary
541) C0024667 - Neoplasm, Mammary
542) C0024667 - Neoplasms, Animal Mammary
543) C0024667 - Neoplasms, Mammary
544) C0027762 - Nervous Mice
545) C0027762 - Nervous Mouse
546) C0027776 - Nesting Behavior
547) C0025931 - Neurologic Mutant Mice
548) C0025931 - Neurologic Mutant Mouse
549) C0025931 - Neurological Mutant Mouse
550) C0027983 - Newcastle Disease
551) C0028058 - Nictitating Membrane
552) C0085243 - NOD Mice
553) C0085243 - NOD Mice, Inbred
554) C0085243 - NOD Mouse
555) C0085243 - NOD Mouse, Inbred

Animals continued:

556) C0085243 - Non Obese Diabetic Mice
557) C0085243 - Non Obese Diabetic Mouse
558) C0085243 - Non-Obese Diabetic Mice
559) C0085243 - Non-Obese Diabetic Mouse
560) C0085243 - Nonobese Diabetic Mice
561) C0085243 - Nonobese Diabetic Mouse
562) C0034693 - Norway Rats
563) C0025932 - Nude Mice
564) C0025932 - Nude Mouse
565) C0034713 - Nude Rat
566) C0034713 - Nude Rats
567) C0025926 - NZB Mice
568) C0025926 - NZB Mice, Inbred
569) C0025926 - NZB Mouse
570) C0025926 - NZB Mouse, Inbred
571) C0025933 - Obese Mice
572) C0025933 - Obese Mouse
573) C0028828 - Octodon
574) C0600548 - OLETF Rat, Inbred
575) C0600548 - OLETF Rats, Inbred
576) C0028972 - Omasum
577) C0029129 - Optic Lobe
578) C0034493 - Oryctolagus cuniculus
579) C0600548 - Otsuka Long Evans Tokushima Fatty Rats
580) C0600548 - Otsuka Long Evans Tokushima Rats
581) C0600548 - Otsuka-Long-Evans-Tokushima Fatty Rats
582) C0600548 - Otsuka-Long-Evans-Tokushima Rats
583) C0029954 - Oviducts
584) C0030209 - Pair Bond
585) C1093031 - Palaeognathae
586) C0324819 - Papio anubis
587) C0324818 - Papio cynocephalus
588) C0324820 - Papio hamadryas
589) C1263339 - Papio papio
590) C0324817 - Papio ursinus
591) C0030500 - Parasitic Diseases, Animal
592) C0030524 - Paratuberculosis
593) C0030612 - Parturient Paresis
594) C0600537 - Passeriformes
595) C0036969 - Pasteurellosis, Pneumonic
596) C0085262 - PC12 Cells
597) C0031021 - Perianal Glands
598) C0324683 - Phalangeridae
599) C0324716 - Phascolarctidae
600) C0206436 - Photoreceptors, Invertebrate
601) C0016627 - Plague, Fowl
602) C0032243 - Pleuropneumonia, Contagious
603) C0276046 - Pneumonia of Calves, Enzootic
604) C0032291 - Pneumonia, Atypical Interstitial, of Cattle
605) C0032306 - Pneumonia, Progressive Interstitial, of Sheep
606) C0376538 - Porcine Reproductive and Respiratory Syndrome
607) C0324713 - Potoroidae
608) C0032851 - Poultry Diseases
609) C0032942 - Predatory Behavior
610) C0242634 - Primate Diseases
611) C0325026 - Procyonidae
612) C0033741 - Protozoan Infections, Animal
613) C0033745 - Proventriculus
614) C0033839 - Pseudorabies
615) C1301021 - Psittacula
616) C0034049 - Pulmonary Adenomatosis, Ovine
617) C0025934 - Quaking Mice
618) C0034493 - Rabbit
619) C0034493 - Rabbit, Domestic
620) C0034493 - Rabbits, Domestic
621) C0034531 - Radiation Injuries, Experimental
622) C0600243 - Range, Home
623) C0600243 - Ranges, Home
624) C0034693 - Rat
625) C0034706 - Rat Inbred Strain
626) C0034706 - Rat Inbred Strains
627) C0034706 - Rat Strain, Inbred
628) C0034706 - Rat Strains, Inbred
629) C0034698 - Rat, ACI
630) C0034713 - Rat, Athymic
631) C0524710 - Rat, August
632) C0034699 - Rat, BB
633) C0034699 - Rat, Bio-Breeding Inbred
634) C0034700 - Rat, BN
635) C0034701 - Rat, BUF
636) C0034703 - Rat, F344
637) C0034698 - Rat, Inbred ACI
638) C0034699 - Rat, Inbred BB
639) C0034700 - Rat, Inbred BN
640) C0034701 - Rat, Inbred BUF
641) C0034703 - Rat, Inbred CDF
642) C0034703 - Rat, Inbred F344
643) C0600547 - Rat, Inbred LEC
644) C0034704 - Rat, Inbred Lew
645) C0600548 - Rat, Inbred OLETF
646) C0034705 - Rat, Inbred SHR
647) C0034706 - Rat, Inbred Strain
648) C0034706 - Rat, Inbred Strains
649) C0034707 - Rat, Inbred WF
650) C0034709 - Rat, Inbred WKY
651) C0086893 - Rat, Laboratory
652) C0034704 - Rat, Lew
653) C0034711 - Rat, Mutant Strains
654) C0034713 - Rat, Nude
655) C0034705 - Rat, SHR
656) C0034705 - Rat, Spontaneously Hypertensive
657) C0034707 - Rat, WF
658) C0034709 - Rat, WKY
659) C0034706 - Rats Inbred Strain
660) C0034706 - Rats Inbred Strains
661) C0034698 - Rats, ACI
662) C0034713 - Rats, Athymic
663) C0524710 - Rats, August
664) C0004728 - Rats, Bandicoot
665) C0034699 - Rats, BB
666) C0034699 - Rats, BB Wistar
667) C0034699 - Rats, Bio-Breeding Inbred
668) C0034700 - Rats, BN
669) C0034701 - Rats, BUF
670) C0600533 - Rats, Dahl
671) C0600534 - Rats, Dahl Hypertensive
672) C0600535 - Rats, Dahl Salt-Resistant
673) C0600534 - Rats, Dahl Salt-Sensitive
674) C0034703 - Rats, F344
675) C0034703 - Rats, Fischer
676) C0242589 - Rats, Holtzman
677) C0034698 - Rats, Inbred A x C 9935 Irish
678) C0034700 - Rats, Inbred Brown Norway
679) C0034701 - Rats, Inbred Buffalo
680) C0034703 - Rats, Inbred CDF
681) C0034703 - Rats, Inbred Fischer 344
682) C0034703 - Rats, Inbred Fisher 344
683) C0034704 - Rats, Inbred Lewis
684) C0600547 - Rats, Inbred Long Evans Cinnamon
685) C0600547 - Rats, Inbred Long-Evans Cinnamon
686) C0034706 - Rats, Inbred Strain
687) C0034707 - Rats, Inbred Wistar Furth
688) C0086893 - Rats, Laboratory
689) C0034704 - Rats, Lew
690) C0324537 - Rats, Long Evans
691) C0600547 - Rats, Long-Evans Cinnamon
692) C0034693 - Rats, Norway
693) C0600548 - Rats, Otsuka-Long-Evans-Tokushima
694) C0600548 - Rats, Otsuka-Long-Evans-Tokushima Fatty

Animals continued:

695) C0034705 - Rats, SHR
696) C0034705 - Rats, Spontaneously Hypertensive
697) C0034715 - Rats, Sprague Dawley
698) C0034707 - Rats, WF
699) C0034707 - Rats, Wistar Furth
700) C0034709 - Rats, Wistar Kyoto
701) C0034709 - Rats, WKY
702) C0034721 - Rattus
703) C0034693 - Rattus norvegicus
704) C0034921 - Reeler Mice
705) C0034921 - Reeler Mouse
706) C0035295 - Reticulum
707) C0035613 - Rift Valley Fever
708) C0035637 - Rinderpest
709) C0035801 - Rodent Diseases
710) C0035946 - Rumen
711) C1093204 - Rupicapra
712) C0036118 - Salmonella Infections, Animal
713) C0036139 - Salt Gland
714) C0600535 - Salt-Resistant Rats, Dahl
715) C0600534 - Salt-Sensitive Rats, Dahl
716) C0004426 - Sarcoma, Avian
717) C0036294 - Scent Glands
718) C0086962 - SCID hu Mice
719) C0085112 - SCID Mice
720) C0085112 - SCID Mouse
721) C0086962 - SCID-hu Mice
722) C0086962 - SCID-hu Mouse
723) C0036457 - Scrapie
724) C0242854 - SENCAR Mice
725) C0242854 - SENCAR Mice, Inbred
726) C0242854 - SENCAR Mouse
727) C0242854 - SENCAR Mouse, Inbred
728) C0036850 - Setariasis
729) C0085112 - Severe Combined Immunodeficient Mice
730) C0036865 - Sex Behavior, Animal
731) C0036946 - Sheep Diseases
732) C0034705 - SHR Rat
733) C0034705 - SHR Rat, Inbred
734) C0034705 - SHR Rats
735) C0034705 - SHR Rats, Inbred
736) C0080151 - Simian Acquired Immunodeficiency Syndrome
737) C0037224 - Simian immunodeficiency virus
738) C0524808 - Spalax
739) C0325331 - Spheniscidae
740) C0034705 - Spontaneously Hypertensive Rat
741) C0034705 - Spontaneously Hypertensive Rats
742) C0034715 - Sprague Dawley Rats
743) C0034715 - Sprague-Dawley Rats
744) C0038125 - Staggerer Mice
745) C0038125 - Staggerer Mouse
746) C0038235 - Steatitis
747) C0038351 - Stomach
748) C0038360 - Stomach, Avian
749) C0038361 - Stomach, Ruminant
750) C0025930 - Strain Mouse, Mutant
751) C0034706 - Strain Rat, Inbred
752) C0034706 - Strain Rats, Inbred
753) C0025927 - Strain, Inbred Mouse
754) C0034706 - Strain, Inbred Rat
755) C0025930 - Strain, Mutant Mouse
756) C0025930 - Strains Mice, Mutant
757) C0034711 - Strains Rat, Mutant
758) C0034711 - Strains Rats, Mutant
759) C0025927 - Strains, Inbred Mouse
760) C0034706 - Strains, Inbred Rat
761) C0025930 - Strains, Mutant Mouse
762) C0038459 - Strongyle Infections, Equine
763) C0024003 - Swayback
764) C0039006 - Swine Diseases
765) C0039007 - Swine Erysipelas
766) C0019841 - Swine Fever
767) C0019841 - Swine Fever, Classical
768) C0039010 - Swine Vesicular Disease
769) C0039011 - Swine, Miniature
770) C0162416 - Swiss Mice
771) C0162416 - Swiss Mouse
772) C0039259 - Tail
773) C0003086 - Tarsus
774) C0039753 - Theileriasis
775) C0040553 - Toxocariasis
776) C0040559 - Toxoplasmosis, Animal
777) C1450009 - Transgenic Founder Mice
778) C0025936 - Transgenic Mice
779) C0025936 - Transgenic Mouse
780) C0324689 - Trichosurus
781) C0041230 - Trypanosomiasis, Bovine
782) C0041306 - Tuberculosis, Avian
783) C0041307 - Tuberculosis, Bovine
784) C0242386 - Udder
785) C0242386 - Udders
786) C0041605 - Ultimobranchial Body
787) C0042465 - Venereal Tumors, Veterinary
788) C0042542 - Vero Cells
789) C0042567 - Vertebrates
790) C0042584 - Vesicular Exanthema of Swine
791) C0042640 - Vibrissae
792) C0080323 - Visna
793) C1135593 - Viverridae
794) C0042932 - Vocalization, Animal
795) C0043086 - Weaver Mice
796) C0043086 - Weaver Mouse
797) C0034707 - WF Rat
798) C0034707 - WF Rat, Inbred
799) C0034707 - WF Rats
800) C0034707 - WF Rats, Inbred
801) C0043152 - White Heifer Disease
802) C0043153 - White Muscle Disease
803) C0043189 - Wing
804) C0034707 - Wistar Furth Rats
805) C0034709 - Wistar Kyoto Rats
806) C0034699 - Wistar Rats, BB
807) C0034709 - WKY Rat
808) C0034709 - WKY Rat, Inbred
809) C0034709 - WKY Rats
810) C0034709 - WKY Rats, Inbred
811) C0043220 - Wool
812) C0043528 - Zoonoses
813) C0034719 - Zucker Rats

Animals Trees (18):

1) C22 - Animal Diseases
2) A13 - Animal Structures
3) I01.880.604.100 - Animal Welfare
4) B01 - Animals
5) C04.619.045 - Carcinoma 256, Walker
6) C04.619.124 - Carcinoma, Brown-Pearce
7) C04.619.169 - Carcinoma, Ehrlich Tumor
8) C04.619.214 - Carcinoma, Krebs 2
9) C04.619.230 - Carcinoma, Lewis Lung
10) G03.230.150.360.250 - Housing, Animal
11) C04.619.531 - Leukemia, Experimental
12) C04.619.540 - Liver Neoplasms, Experimental
13) A11.251.210.520 - LLC-PK1 Cells
14) C04.619.590 - Mammary Neoplasms, Experimental
15) C04.619.600 - Melanoma, Experimental
16) G08.520.769.498 - Pregnancy, Animal
17) C04.619.857 - Sarcoma, Experimental
18) A11.251.210.955 - Vero Cells

Cats (17):

1) C0007450 - Cat
2) C0007350 - Cat Diseases
3) C0007450 - Cat, Domestic
4) C0007450 - Cats, Domestic
5) C0007450 - Domestic Cat
6) C0007450 - Domestic Cats
7) C0325089 - feline
8) C0079335 - Feline Acquired Immunodeficiency Syndrome
9) C0007350 - Feline Disease
10) C0085306 - Feline infectious peritonitis
11) C0524517 - Felis
12) C0007450 - Felis catus
13) C0007450 - Felis domestica
14) C0007450 - Felis domesticus
15) C0007450 - Felis sylvestris catus
16) C0085164 - Leukemia, Feline
17) C1135593 - Viverridae

Cats Trees (1):

1) C22.180 - Cat Diseases

Cattle (22):

1) C0007452 - Bovine
2) C0032291 - Bovine atypical interstitial pneumonia
3) C0302363 - Bovine brucellosis
4) C1449809 - Bovine Respiratory Disease Complex
5) C0006075 - Bovine Virus Diarrhea-Mucosal Disease
6) C0302363 - Brucellosis, Bovine
7) C0007452 - Cattle
8) C0007453 - Cattle Diseases
9) C0085209 - Encephalopathy, Bovine Spongiform
10) C0085165 - Enzootic bovine leukosis
11) C0014481 - Ephemeral Fever
12) C0016697 - Freemartinism
13) C0021334 - Infectious Bovine Rhinotracheitis
14) C0024106 - Lumpy Skin Disease
15) C0024587 - Malignant Catarrh
16) C0024895 - Mastitis, Bovine
17) C0276046 - Pneumonia of Calves, Enzootic
18) C0032291 - Pneumonia, Atypical Interstitial, of Cattle
19) C0039753 - Theileriasis
20) C0041230 - Trypanosomiasis, Bovine
21) C0041307 - Tuberculosis, Bovine
22) C0043152 - White Heifer Disease

Cattle Trees (1):

1) C22.196 - Cattle Diseases

Child (142):

1) C0008095 - Abandoned Child
2) C0008095 - Abandoned Children
3) C0008060 - Abuse, Child
4) C0008062 - Abuse, Child Sexual
5) C0008060 - Abuses, Child
6) C0008063 - Advocacies, Child
7) C0008063 - Advocacy, Child
8) C0001843 - Aid to Families with Dependent Children
9) C0008066 - Behavior Disorders, Child
10) C0008065 - Behavior, Child
11) C0041903 - Birth, Unwanted
12) C0041903 - Births, Unwanted
13) C0008067 - Care, Child
14) C0008070 - Center, Child Daycare
15) C0008070 - Centers, Child Daycare
16) C0008059 - Child
17) C0008060 - Child Abuses
18) C0008063 - Child Advocacies
19) C0008069 - Child Custodies
20) C0008070 - Child Daycare Center
21) C0008070 - Child Daycare Centers
22) C0008074 - Child Development Disorders, Pervasive
23) C0008077 - Child Guidance Clinic
24) C0008076 - Child Guidances
25) C0008078 - Child Health
26) C0008079 - Child Health Service
27) C0008081 - Child Languages
28) C1257753 - Child Malnutrition
29) C0008062 - Child Molestation, Sexual
30) C0008083 - Child Mortalities
31) C0008083 - Child Mortality
32) C0553726 - Child neglect
33) C0008087 - Child Nutrition Disorder
34) C0008086 - Child Nutritions
35) C1257764 - Child Overnutrition
36) C0008090 - Child Reactive Disorder
37) C0008091 - Child Rearings
38) C0008079 - Child Service, Health
39) C0008079 - Child Services, Health
40) C0008062 - Child Sexual Abuse
41) C0079112 - Child Support
42) C0008059 - Children
43) C0079111 - Children of Impaired Parents
44) C0008095 - Children, Abandoned
45) C0008096 - Children, Exceptional
46) C0008097 - Children, Gifted
47) C0008098 - Children, Hospitalized
48) C0079111 - Children, Impaired Parents'
49) C0008099 - Children, Institutionalized
50) C0008100 - Children, Preschool
51) C0008101 - Children, Unwanted
52) C0008077 - Clinic, Child Guidance
53) C0008077 - Clinics, Child Guidance
54) C0008069 - Custodies, Child
55) C0008069 - Custody, Child
56) C0008070 - Day Care Centers for Children
57) C0008070 - Daycare Center, Child
58) C0008070 - Daycare Centers for Children
59) C0008070 - Daycare Centers, Child
60) C0008071 - Development, Child
61) C0205714 - Development, Infant
62) C0008066 - Disorders, Child Behavior
63) C0008096 - Exceptional Child
64) C0008096 - Exceptional Children
65) C0008097 - Gifted Child
66) C0008097 - Gifted Children
67) C0008077 - Guidance Clinic, Child
68) C0008077 - Guidance Clinics, Child
69) C0008076 - Guidance, Child
70) C0008076 - Guidances, Child
71) C0008079 - Health Child Service
72) C0008079 - Health Child Services
73) C0021276 - Health Infant Service
74) C0021276 - Health Infant Services
75) C0008079 - Health Service, Child
76) C0021276 - Health Service, Infant
77) C0008079 - Health Services, Child
78) C0021276 - Health Services, Infant
79) C0008078 - Health, Child
80) C0008098 - Hospitalized Child
81) C0008098 - Hospitalized Children
82) C0079111 - Impaired Parents Offspring
83) C0079111 - Impaired Parents Offsprings
84) C0079111 - Impaired Parents' Children
85) C0205714 - Infant Development
86) C0021276 - Infant Health Service
87) C0021276 - Infant Health Services
88) C0021281 - Infant Psychology
89) C0021276 - Infant Service, Health
90) C0021276 - Infant Services, Health
91) C0008099 - Institutionalized Child
92) C0008099 - Institutionalized Children
93) C0008081 - Language, Child
94) C0008081 - Languages, Child
95) C1257753 - Malnutrition in Children
96) C1257753 - Malnutrition, Child
97) C0008062 - Molestation, Sexual Child
98) C0008062 - Molestation, Sexual, Child
99) C0008083 - Mortalities, Child
100) C0008083 - Mortality, Child
101) C0553726 - neglected child finding
102) C0008087 - Nutrition Disorder, Child
103) C0008087 - Nutrition Disorders, Child
104) C0008086 - Nutrition, Child
105) C0008086 - Nutritions, Child
106) C0079111 - Offspring of Impaired Parents
107) C1257764 - Overnutrition, Child
108) TxLookup - paediatric
109) C0079111 - Parents Offspring, Impaired
110) C0079111 - Parents Offsprings, Impaired
111) C0876889 - Pediatric
112) C0008089 - Pediatric Psychology
113) C0030755 - Pediatrics
114) C0008074 - Pervasive Child Development Disorders
115) C0008100 - Preschool Child
116) C0008100 - Preschool Children
117) C0008088 - Psychiatry, Child
118) C0008089 - Psychology, Child
119) C0021281 - Psychology, Infant
120) C0008089 - Psychology, Pediatric
121) C0008067 - Puericulture
122) C0008090 - Reactive Disorder, Child
123) C0008091 - Rearing, Child
124) C0008091 - Rearings, Child
125) C0008079 - Service, Child Health
126) C0008079 - Service, Health Child
127) C0021276 - Service, Health Infant
128) C0021276 - Service, Infant Health
129) C0008079 - Services, Child Health
130) C0008079 - Services, Health Child

Child continued:
131) C0021276 - Services, Health Infant
132) C0021276 - Services, Infant Health
133) C0008062 - Sexual Abuse of Child
134) C0008062 - Sexual Abuse, Child
135) C0008062 - Sexual Child Abuse
136) C0008062 - Sexual Child Molestation
137) C0079112 - Support, Child
138) C0041903 - Unwanted Birth
139) C0041903 - Unwanted Births
140) C0008101 - Unwanted Child
141) C0008101 - Unwanted Children
142) C0008093 - Welfare, Child

Child Trees (1):
1) M01.060.406 - Child

Dogs (8):
1) C0012979 - Canine Diseases
2) C0012984 - Canis familiaris
3) C0012984 - Dog
4) C0012979 - Dog Diseases
5) C1280551 - Dog family
6) C0012984 - familiaris, Canis
7) C0019191 - Hepatitis, Infectious Canine
8) C0019556 - Hip Dysplasia, Canine

Dogs Trees (1):
1) C22.268 - Dog Diseases

Female (522):
1) C0000786 - Abortion
2) C0000793 - Abortion on Demand
3) C0000806 - Abortion, Eugenic
4) C0000809 - Abortion, Habitual
5) C0392535 - Abortion, Induced
6) C0000814 - Abortion, Missed
7) C0000817 - Abortion, Septic
8) C0000821 - Abortion, Threatened
9) C0000823 - Abortion, Veterinary
10) C0000812 - Abortions, Legal
11) C0000820 - Abortions, Therapeutic
12) C0000832 - Abruptio Placentae
13) C0001575 - Adnexa Uteri
14) C0001576 - Adnexal Diseases
15) C0001577 - Adnexitis
16) C0001588 - Adolescent, Female
17) C0001588 - Adolescents, Female
18) C0002453 - Amenorrhea
19) C0342008 - Amniotic fluid pulmonary embolism
20) C0002935 - Anestrus
21) C0003128 - Anovulation
22) C0085166 - Bacterial Vaginitides
23) C0085166 - Bacterial Vaginitis
24) C0085166 - Bacterial Vaginoses
25) C0085166 - Bacterial Vaginosis
26) C0004768 - Bartholin Glands
27) C0004768 - Bartholin's Glands
28) C0004768 - Bartholins Glands
29) C0242810 - Battered Women
30) C0029976 - Blastocyst Implantation
31) C1135596 - Blastocyst Implantation Inhibition
32) C1135596 - Blastocyst Implantation Suppression
33) C0029977 - Blastocyst Implantation, Delayed
34) C0029976 - Blastocyst Implantation, natural
35) C0029976 - Blastocyst Implantations
36) C0029977 - Blastocyst Implantations, Delayed
37) C0006157 - Breech Presentation
38) C0006205 - Broad Ligament
39) C0006852 - Candidiasis of vagina
40) C1135969 - Cell, Granulosa-Luteal
41) C1135969 - Cell, Granulosa-Lutein
42) C1135969 - Cell, Large Luteal
43) C0024156 - Cell, Luteal
44) C0024156 - Cell, Lutein
45) C1135970 - Cell, Small Luteal
46) C1135970 - cell, Theca-Luteal
47) C1135970 - Cell, Theca-Lutein
48) C1135969 - Cells, Granulosa-Luteal
49) C1135969 - Cells, Granulosa-Lutein
50) C1135969 - Cells, Large Luteal
51) C0024156 - Cells, Luteal
52) C0024156 - Cells, Lutein
53) C1135970 - Cells, Small Luteal
54) C1135970 - cells, Theca-Luteal
55) C1135970 - Cells, Theca-Lutein
56) C0007868 - Cervical dysplasia
57) C0600454 - Cervical Ripening
58) C0007860 - Cervicitis
59) C0007874 - Cervix
60) C0007867 - Cervix Diseases
61) C0007869 - Cervix Erosion
62) C0007871 - Cervix Incompetence
63) C0007873 - Cervix Neoplasms
64) C0007874 - Cervix Uteri
65) C0007874 - Cervix, Uterine
66) C0007874 - Cervixes
67) TxLookup - cesarean
68) C0007876 - Cesarean section
69) C0206101 - Cesarean Section, Repeat
70) C0008043 - Chiari-Frommel Syndrome
71) C0008495 - Chorioamnionitis
72) C0008497 - Choriocarcinoma
73) C0008509 - Chorionic Villi Sampling
74) C0887804 - Circulation, Fetal-Placental
75) C0887804 - Circulation, Fetoplacental
76) C0887803 - Circulation, Placental
77) C0242622 - Circulation, Uteroplacental
78) C0887804 - Circulations, Fetal-Placental
79) C0887804 - Circulations, Fetoplacental
80) C0079341 - Circumcision, Female
81) C0008984 - Clitoris
82) C0010092 - Corpus Luteum

Female continued:

83) C0010095 - Corpus Luteum Maintenance
84) C0010096 - Corpus Luteum Regression
85) C0011106 - Decidua
86) C0011107 - Decidual Cell Reaction
87) C0011107 - Decidual Cell Reactions
88) C0029977 - Delayed Blastocyst Implantation
89) C0029977 - Delayed Blastocyst Implantations
90) C0029977 - Delayed Embryo Implantation
91) C0029977 - Delayed Embryo Implantations
92) C0029977 - Delayed Nidation
93) C0029977 - Delayed Nidations
94) C0029977 - Delayed Ovum Implantation
95) C0029977 - Delayed Ovum Implantations
96) C0011209 - Deliveries, Obstetric
97) C0011442 - Dentists, Women
98) C0221074 - Depression, Postpartum
99) C0085207 - Diabetes, Gestational
100) C0012154 - Diestrus
101) C0012358 - Dilatation and Curettage
102) C0242172 - Disease, Inflammatory Pelvic
103) C0242172 - Disease, Pelvic Inflammatory
104) C0242172 - Diseases, Inflammatory Pelvic
105) C0242172 - Diseases, Pelvic Inflammatory
106) C0013390 - Dysmenorrhea
107) C0013394 - Dyspareunia
108) C0013418 - Dystocia
109) C0013537 - Eclampsia
110) C0032914 - Edema Proteinuria Hypertension Gestosis
111) C0032914 - Edema-Proteinuria-Hypertension Gestosis
112) C0013927 - Embolism, Amniotic Fluid
113) C1135596 - Embryo Implantation Inhibition
114) C1135596 - Embryo Implantation Suppression
115) C0029977 - Embryo Implantation, Delayed
116) C0029976 - Embryo Implantations
117) C0029977 - Embryo Implantations, Delayed
118) C0013936 - Embryonic Development
119) C0014173 - Endometrial Hyperplasia
120) C0014170 - Endometrial Neoplasms
121) C0014175 - Endometriosis
122) C0014175 - Endometriosis, site unspecified
123) C0014179 - Endometritis
124) C0007103 - Endometrium
125) C0032914 - EPH Complex
126) C0032914 - EPH Gestosis
127) C0032914 - EPH Toxemia
128) C0032914 - EPH Toxemias
129) C0014586 - Episiotomy
130) C0014935 - Estrogen Replacement Therapy
131) C0014948 - Estrus
132) C0014950 - Estrus Synchronization
133) C0015362 - Extraction, Obstetrical
134) C0015560 - Fallopian Tube
135) C0015556 - Fallopian Tube Diseases
136) C0015558 - Fallopian Tube Neoplasms
137) C0015560 - Fallopian Tubes
138) C0015780 - Female
139) C0001588 - Female Adolescent
140) C0017421 - Female genitalia
141) C0021361 - Female infertility
142) C0015786 - Female Sexual Arousal Disorder
143) C0086287 - Females
144) C0015894 - Fertile Period
145) C0018811 - Fetal Heart Rate
146) C0018811 - Fetal Heart Rates
147) C0015944 - Fetal Membranes, Premature Rupture
148) C0887804 - Fetal Placental Circulation
149) C0887804 - Fetal-Placental Circulation
150) C0887804 - Fetal-Placental Circulations
151) C0015958 - Fetofetal Transfusion
152) C0015959 - Fetomaternal Transfusion
153) C0887804 - Fetoplacental Circulation
154) C0887804 - Fetoplacental Circulations
155) C0016426 - Follicular Atresia
156) C0016431 - Follicular Fluid
157) C0016434 - Follicular Phase
158) C0016722 - Frigidity
159) C0235660 - Galactorrhea
160) C0269995 - Galactorrhea associated with childbirth
161) C0016999 - Gamete Intrafallopian Transfer
162) C0017411 - Genital Diseases, Female
163) C0017416 - Genital Neoplasms, Female
164) C0017421 - Genitalia, Female
165) C0032914 - Gestosis, Edema-Proteinuria-Hypertension
166) C0032914 - Gestosis, EPH
167) C0032914 - Gestosis, Hypertension-Edema-Proteinuria
168) C0032914 - Gestosis, Proteinuria-Edema-Hypertension
169) TxLookup - girl
170) C0004768 - Glands, Bartholin's
171) C0018207 - Granulosa Cells
172) C1135969 - Granulosa Luteal Cells
173) C1135969 - Granulosa Lutein Cells
174) C1135969 - Granulosa-Luteal Cell
175) C1135969 - Granulosa-Luteal Cells
176) C1135969 - Granulosa-Lutein Cell
177) C1135969 - Granulosa-Lutein Cells
178) C0242543 - Group, Women's
179) C0242543 - Groups, Women's
180) C0018414 - Gynatresia
181) C0038902 - Gynecologic Surgical Procedures
182) C0043212 - Health Service, Woman's
183) C0043212 - Health Service, Women's
184) C0043212 - Health Services, Woman
185) C0043212 - Health Services, Woman's
186) C0043212 - Health Services, Womans
187) C0043212 - Health Services, Women
188) C0043212 - Health Services, Women's
189) C0080339 - Health, Woman's
190) C0080339 - Health, Women's
191) C0018811 - Heart Rate, Fetal
192) C0018811 - Heart Rates, Fetal
193) C0162739 - HELLP Syndrome
194) C0018934 - Hematocolpos
195) C0018948 - Hematometra
196) C0018948 - Hemometra
197) C0019343 - Herpes Gestationis
198) C0242786 - High Risk Pregnancy
199) C0242786 - High-Risk Pregnancies
200) C0242786 - High-Risk Pregnancy
201) C0019857 - Home Childbirth
202) C0242659 - Homosexuality, Female
203) C0043210 - Human Females
204) C0020217 - Hydatidiform Mole
205) C0008493 - Hydatidiform Mole, Invasive
206) C0020412 - Hymen
207) C0020450 - Hyperemesis Gravidarum
208) C0032914 - Hypertension Edema Proteinuria Gestosis
209) C0340274 - Hypertension, Pregnancy-Induced
210) C0032914 - Hypertension-Edema-Proteinuria Gestosis
211) C0020699 - Hysterectomy
212) C0020700 - Hysterectomy, Vaginal
213) C1135596 - Implantation Inhibition, Blastocyst
214) C1135596 - Implantation Suppression, Blastocyst
215) C1135596 - Implantation Suppression, Embryo
216) C0029976 - Implantation, Blastocyst
217) C0029976 - Implantation, Embryo
218) C0029976 - Implantation, Ovum
219) C0029977 - Implantation, Ovum, Delayed
220) C0029976 - Implantations, Blastocyst
221) C0029976 - Implantations, Embryo

Female continued:

222) C0029976 - Implantations, Ovum
223) C0600107 - Incomplete legal abortion
224) C0000810 - Incomplete spontaneous abortion
225) C0008495 - Infection of amniotic sac and membranes
226) C0021361 - Infertility, Female
227) C0282657 - Infibulation
228) C0282657 - Infibulations
229) C0242172 - Inflammatory Disease, Pelvic
230) C0242172 - Inflammatory Diseases, Pelvic
231) C0242172 - Inflammatory Pelvic Disease
232) C0242172 - Inflammatory Pelvic Diseases
233) C0269886 - Inversion of uterus during delivery
234) C0022783 - Kraurosis Vulvae
235) C0022864 - Labor (Childbirth)
236) C0022865 - Labor Complications
237) C0022868 - Labor Onset
238) C0474368 - Labor Pain
239) C0022869 - Labor Presentation
240) C0022871 - Labor Stage, First
241) C0022872 - Labor Stage, Second
242) C0022873 - Labor Stage, Third
243) C0022873 - Labor Stages, Third
244) C0022875 - Labor, Induced
245) C0022876 - Labor, Premature
246) C0022873 - Labor, Third Stage
247) C0006147 - Lactation
248) C0022927 - Lactation Disorders
249) C1135969 - Large Luteal Cell
250) C1135969 - Large Luteal Cells
251) C0000812 - Legal Abortion
252) C0000812 - Legal Abortions
253) C0242659 - Lesbian
254) C1533642 - Lesbians
255) C0023533 - Leukorrhea
256) C0043216 - Liberation, Women's
257) C0024156 - Luteal Cell
258) C1135969 - Luteal Cell, Large
259) C1135970 - Luteal Cell, Small
260) C0024156 - Luteal Cells
261) C1135969 - Luteal Cells, Large
262) C1135970 - Luteal Cells, Small
263) C0024153 - Luteal Phase
264) C0010096 - Luteal Regression
265) C0024156 - Lutein Cell
266) C0024156 - Lutein Cells
267) C0010096 - Luteolysis
268) C0007847 - Malignant neoplasm of cervix uteri
269) C0015560 - Mammalian Oviduct
270) C0015560 - Mammalian Oviducts
271) C0085076 - Mammaplasty
272) C0024894 - Mastitis
273) C0024895 - Mastitis, Bovine
274) C0243033 - Maternal Exposure
275) C0024929 - Maternal-Fetal Exchange
276) C0200040 - Medical procedure on cervix
277) C0025184 - Meigs' Syndrome
278) C0025274 - Menarche
279) C0025320 - Menopause
280) C0025322 - Menopause, Premature
281) C0025323 - Menorrhagia
282) C0025329 - Menstrual cycle
283) C0016434 - Menstrual cycle, proliferative phase
284) C0025344 - Menstruation
285) C0025345 - Menstruation Disturbances
286) C0025597 - Metestrus
287) C0025874 - Metrorrhagia
288) C0026132 - Milk Ejection
289) C0312416 - Morning Sickness
290) C0027088 - myometrium
291) C0027484 - Natural Childbirth
292) C0496920 - Neoplasm of uncertain or unknown behavior of ovary
293) C0029976 - Nidation
294) C0029977 - Nidation, Delayed
295) C0029976 - Nidations
296) C0029977 - Nidations, Delayed
297) C0085166 - Nonspecific Vaginitis
298) C0011209 - Obstetric Deliveries
299) C0011209 - Obstetric Delivery
300) C0038906 - Obstetric Surgical Procedures
301) C0079924 - Oligohydramnios
302) C0028949 - Oligomenorrhea
303) C0029051 - Oophoritis
304) C0029458 - Osteoporosis, Postmenopausal
305) C0029927 - Ovarian Cysts
306) C0029928 - Ovarian Diseases
307) C0085215 - Ovarian Failure, Premature
308) C0018120 - Ovarian Follicle
309) C0085083 - Ovarian Hyperstimulation Syndrome
310) C0029936 - Ovariectomy
311) C0029928 - Ovary
312) C0015560 - Oviduct, Mammalian
313) C0015560 - Oviducts, Mammalian
314) C0029957 - Oviposition
315) C0029965 - Ovulation
316) C0029976 - Ovum Implantation
317) C0029977 - Ovum Implantation, Delayed
318) C0029976 - Ovum Implantations
319) C0029977 - Ovum Implantations, Delayed
320) C0029979 - Ovum Transport
321) C0013394 - Pain, coitus, female
322) C0030455 - Parametritis
323) C0030563 - PARITY
324) C0030584 - Parovarian Cyst
325) C0030612 - Parturient Paresis
326) C0242172 - Pelvic Disease, Inflammatory
327) C0242172 - Pelvic Diseases, Inflammatory
328) C0242172 - Pelvic Inflammatory Diseases
329) C0993589 - Perimenopause
330) C0086839 - Period, Postpartum
331) C0085547 - Phenylketonuria, Maternal
332) C0032044 - Placenta Accreta
333) C0032045 - Placenta Diseases
334) C0032046 - Placenta Praevia
335) C0242669 - Placenta, Retained
336) C0032051 - Placental Insufficiency
337) C0032058 - Placentation
338) C0032460 - Polycystic Ovary Syndrome
339) C0020224 - Polyhydramnios
340) C1446947 - Postimplantation Embryo Development
341) TxLookup - Postimplantation Phase
342) C0206159 - Postmenopause
343) C0086839 - Postpartum
344) C0032796 - Postpartum Amenorrhea
345) C0032797 - Postpartum Hemorrhage
346) C0086839 - Postpartum Period
347) C0032804 - Postpartum Women
348) C0032914 - Pre Eclampsia
349) C0032914 - Pre-Eclampsia
350) C0032914 - Preeclampsia
351) C0242786 - Pregnancies, High-Risk
352) C0032961 - Pregnancy
353) C0032962 - Pregnancy Complications
354) C0032963 - Pregnancy Complications, Cardiovascular
355) C0032964 - Pregnancy Complications, Hematologic
356) C0032965 - Pregnancy Complications, Infectious
357) C0032966 - Pregnancy Complications, Neoplastic
358) C0162494 - Pregnancy Complications, Parasitic
359) C0032968 - Pregnancy in Adolescence

Female continued:

360) C0032969 - Pregnancy in Diabetics
361) C0032971 - Pregnancy Maintenance
362) C0032972 - Pregnancy Outcome
363) C0032975 - Pregnancy Rate
364) C0242836 - Pregnancy Reduction, Multifetal
365) C0032914 - Pregnancy Toxemia
366) C0032914 - Pregnancy Toxemias
367) C0032984 - Pregnancy, Abdominal
368) C0032986 - Pregnancy, Animal
369) C0032987 - Pregnancy, Ectopic
370) C0242786 - Pregnancy, High Risk
371) C0242786 - Pregnancy, High-Risk
372) C0032989 - Pregnancy, Multiple
373) C0032993 - Pregnancy, Prolonged
374) C0032994 - Pregnancy, Tubal
375) C0041747 - Pregnancy, Unplanned
376) C0032995 - Pregnancy, Unwanted
377) C0549206 - Pregnant
378) C0033011 - Pregnant Women
379) C1446949 - Preimplantation Embryo Development
380) TxLookup - Preimplantation Phase
381) C0151526 - Premature Birth
382) C0206158 - Premenopause
383) C0033046 - Premenstrual syndrome
384) C0033054 - Prenatal Exposure Delayed Effects
385) C0033274 - Proestrus
386) C0032914 - Proteinuria Edema Hypertension Gestosis
387) C0032914 - Proteinuria-Edema-Hypertension Gestosis
388) C0033778 - Pruritus Vulvae
389) C0033831 - Pseudopregnancy
390) C0034040 - Puerperal Disorders
391) C0034041 - Puerperal Infection
392) C0034042 - Puerperium
393) C0018811 - Rate, Fetal Heart
394) C0018811 - Rates, Fetal Heart
395) C0034895 - Rectovaginal Fistula
396) C0010096 - Regression, Corpus Luteum
397) C0010096 - Regression, Luteal
398) C0206076 - Reproductive History
399) C0043213 - Right, Woman's
400) C0043213 - Right, Women's
401) C0043213 - Rights, Woman's
402) C0043213 - Rights, Women's
403) C0035877 - Round Ligament
404) C0015560 - Salpinges
405) C0036130 - Salpingitis
406) C0036136 - Salpingostomy
407) C0015560 - Salpinx
408) C0043212 - Service, Woman's Health
409) C0043212 - Service, Women's Health
410) C0043212 - Services, Woman Health
411) C0043212 - Services, Woman's Health
412) C0043212 - Services, Womans Health
413) C0043212 - Services, Women Health
414) C0043212 - Services, Women's Health
415) C0043212 - Services, Womens Health
416) C1135970 - Small Luteal Cell
417) C1135970 - Small Luteal Cells
418) C0037853 - Sperm-Ovum Interactions
419) C0000786 - Spontaneous abortion
420) C0022873 - Stage, Third Labor
421) C0022873 - Stages, Third Labor
422) C0043214 - Status, Women's
423) C0038289 - Sterilization, Tubal
424) C0010092 - Structure of corpus luteum of ovary
425) C0020412 - Structure of hymen
426) C0038822 - Superfetation
427) C0038835 - Superovulation
428) C0000811 - Termination of pregnancy
429) C0039748 - Theca Cells
430) C1135970 - Theca Luteal cells
431) C1135970 - Theca Lutein Cells
432) C1135970 - Theca-Luteal cell
433) C1135970 - Theca-Luteal cells
434) C1135970 - Theca-Lutein Cell
435) C1135970 - Theca-Lutein Cells
436) C0000820 - Therapeutic Abortion
437) C0000820 - Therapeutic Abortions
438) C0022873 - Third Labor Stage
439) C0022873 - Third Labor Stages
440) C0022873 - Third Stage Labor
441) C0040348 - Tocolysis
442) C0032914 - Toxemia, EPH
443) C0032914 - Toxemia, Pregnancy
444) C0032914 - Toxemias, EPH
445) C0032914 - Toxemias, Pregnancy
446) C0040862 - Trial of Labor
447) C0040923 - Trichomonas Vaginitis
448) C0041182 - Trophoblastic Neoplasms
449) C0206666 - Trophoblastic Tumor, Placental Site
450) C0038289 - Tubal sterilization
451) C0015560 - Tube, Fallopian
452) C0015560 - Tube, Uterine
453) C0041311 - Tuberculosis, Female Genital
454) C0015560 - Tubes, Fallopian
455) C0015560 - Tubes, Uterine
456) C0080265 - Ultrasonography, Prenatal
457) C0032995 - Unwanted pregnancy
458) C0001575 - Uterine adnexae structure
459) C0007874 - Uterine Cervix
460) C0042130 - Uterine Contraction
461) C0042131 - Uterine Diseases
462) C0042134 - Uterine hemorrhage
463) C0042135 - Uterine Inertia
464) C0162482 - Uterine Inversion
465) C0040345 - Uterine Monitoring
466) C0042138 - Uterine Neoplasms
467) C0042139 - Uterine Perforation
468) C0042140 - Uterine Prolapse
469) C0042143 - Uterine Rupture
470) C0015560 - Uterine Tube
471) C0015560 - Uterine Tubes
472) C0242622 - Uteroplacental Circulation
473) C0042131 - uterus
474) C0042223 - Vacuum Curettage
475) C0042225 - Vacuum Extraction, Obstetrical
476) C0042232 - Vagina
477) C0042232 - Vaginal
478) C0080301 - Vaginal Birth after Cesarean
479) C0227791 - Vaginal Discharge
480) C0042251 - Vaginal Diseases
481) C0042253 - Vaginal Fistula
482) C0042258 - Vaginal Neoplasms
483) C0079104 - Vaginal Smears
484) C0042266 - Vaginismus
485) C0085166 - Vaginitides, Bacterial
486) C0042267 - Vaginitis
487) C0085166 - Vaginitis, Bacterial
488) C0085166 - Vaginitis, Nonspecific
489) C0085166 - Vaginoses, Bacterial
490) C0085166 - Vaginosis, Bacterial
491) C0042556 - Version, Fetal
492) C0042582 - Vesicovaginal Fistula
493) C0042993 - Vulva
494) C0042994 - Vulvar Diseases
495) C0042995 - Vulvar Neoplasms
496) C0042996 - Vulvitis
497) C0042998 - Vulvovaginitis
498) C0043210 - Woman

Female continued:

499) C0080339 - Woman Health
500) C0043212 - Woman Health Services
501) C0043213 - Woman Rights
502) C0080339 - Woman's Health
503) C0043212 - Woman's Health Service
504) C0043212 - Woman's Health Services
505) C0043213 - Woman's Right
506) C0043213 - Woman's Rights
507) C0043215 - Woman, Working
508) C0043210 - Women
509) C0242543 - Women Groups
510) C0080339 - Women Health
511) C0043212 - Women Health Services
512) C0043214 - Women Status
513) C0242543 - Women's Group
514) C0242543 - Women's Groups
515) C0080339 - Women's Health
516) C0043212 - Women's Health Service
517) C0043216 - Women's Liberation
518) C0043213 - Women's Right
519) C0043214 - Women's Status
520) C0032804 - Women, Postpartum
521) C0043215 - Working Woman
522) C0043215 - Working Women

Female Trees (12):

1) G08.520.188 - Estrous Cycle
2) C13.371 - Genital Diseases, Female
3) A05.360.319 - Genitalia, Female
4) E04.950.300 - Gynecologic Surgical Procedures
5) G09.330.553.400.509.430 - Heart Rate, Fetal
6) G08.520.440 - Menstrual Cycle
7) C23.550.568 - Menstruation Disturbances
8) E04.520 - Obstetric Surgical Procedures
9) G08.520.734 - Postpartum Period
10) G08.520.769 - Pregnancy
11) C13.703 - Pregnancy Complications
12) G08.520.769.498 - Pregnancy, Animal

Cricetinae (7):

1) C0085080 - Chinese hamster ovary cell
2) C0018555 - Chinese Hamsters
3) C0085080 - CHO Cells
4) C0018557 - Cricetinae
5) C0010321 - Cricetus
6) C0018557 - Hamster
7) C0018555 - Hamsters, Chinese

Cricetinae Trees (2):

1) A11.251.210.200 - CHO Cells
2) B01.150.900.649.865.635.150 - Cricetinae

Humans (73):

1) C0001487 - Adenovirus Infections, Human
2) C0001578 - Adolescence
3) C0205653 - Adolescent
4) C0001675 - Adult
5) C0001792 - Aged
6) C0006287 - Bronchopulmonary Dysplasia
7) C0282560 - Caco-2 Cells
8) C0008059 - Child
9) C0008100 - Child, Preschool
10) C0079204 - Dental Care for Aged
11) C0001792 - Elderly
12) C0016539 - Forefoot, Human
13) C0079377 - Frail Elderly
14) C0017429 - Genome, Human
15) C0242543 - Group, Women's
16) C0242543 - Groups, Women's
17) C0043212 - Health Service, Woman's
18) C0043212 - Health Service, Women's
19) C0043212 - Health Services, Woman
20) C0043212 - Health Services, Woman's
21) C0043212 - Health Services, Womans
22) C0043212 - Health Services, Women
23) C0043212 - Health Services, Women's
24) C0080339 - Health, Woman's
25) C0080339 - Health, Women's
26) C0018873 - Hela Cells
27) C0282549 - HL-60 Cells
28) C0019874 - Hominidae
29) C0020114 - Homo sapiens
30) C0282639 - HT29 Cells
31) C0020114 - Human
32) C0043210 - Human Females
33) C0020192 - Hyaline Membrane Disease
34) C0021270 - Infant
35) C0021289 - Infant, Newborn
36) C0376448 - Jurkat Cells
37) C0022539 - KB Cells
38) C0085429 - Koro
39) C0025266 - Male population group
40) C0024554 - MAN
41) C0020114 - Man (Taxonomy)
42) C0020114 - Man, Modern
43) C0025266 - Men
44) C0026062 - Middle Age
45) C0020114 - Modern Man
46) C0021289 - Newborn infant
47) C0029458 - Osteoporosis, Postmenopausal
48) C0030705 - Patient

Humans continued:

49) C0030705 - Patients
50) C0031190 - Persistent Fetal Circulation Syndrome
51) C0043212 - Service, Woman's Health
52) C0043212 - Service, Women's Health
53) C0043212 - Services, Woman Health
54) C0043212 - Services, Woman's Health
55) C0043212 - Services, Womans Health
56) C0043212 - Services, Women Health
57) C0043212 - Services, Women's Health
58) C0043212 - Services, Womens Health
59) C0000786 - Spontaneous abortion
60) C0043210 - Woman
61) C0080339 - Woman Health
62) C0043212 - Woman Health Services
63) C0080339 - Woman's Health
64) C0043212 - Woman's Health Service
65) C0043212 - Woman's Health Services
66) C0043210 - Women
67) C0242543 - Women Groups
68) C0080339 - Women Health
69) C0043212 - Women Health Services
70) C0242543 - Women's Group
71) C0242543 - Women's Groups
72) C0080339 - Women's Health
73) C0043212 - Women's Health Service

Humans Trees (4):

1) M01.060 - Age Groups
2) A01.378.610.250.149 - Ankle
3) A11.284.187.520.300 - Chromosomes, Human
4) A01.378.610.250.300 - Forefoot, Human

Infant (3):

1) TxLookup - babies
2) C0021270 - Baby
3) C0021270 - Infant

Infant, Newborn (29):

1) C0002636 - Amniotic Band Syndrome
2) C0002891 - Anemia, Neonatal
3) C0004045 - Asphyxia Neonatorum
4) C0006287 - Bronchopulmonary Dysplasia
5) C0014761 - Erythroblastosis, Fetal
6) C0019088 - Hemorrhagic Disease of Newborn
7) C0020192 - Hyaline Membrane Disease
8) C0021289 - Infant, Newborn
9) C0021290 - Infant, Newborn, Diseases
10) C0021295 - Infant, Premature, Diseases
11) C0021289 - Infants, Newborn
12) C0021709 - Intensive Care Units, Neonatal
13) C0021711 - Intensive Care, Neonatal
14) C0022353 - Jaundice, Neonatal
15) C0023529 - Leukomalacia, Periventricular
16) C0025048 - Meconium Aspiration
17) C0027609 - Neonatal Abstinence Syndrome
18) C0079893 - Neonatal Nursing
19) C0027617 - Neonatal Screening
20) C0021289 - Neonate
21) C0021289 - Newborn
22) C0021289 - Newborn infant
23) C0021289 - Newborn Infants
24) C0021289 - Newborns
25) C0029076 - Ophthalmia Neonatorum
26) C0031190 - Persistent Fetal Circulation Syndrome
27) C0035220 - Respiratory Distress Syndrome, Newborn
28) C0035344 - Retinopathy of Prematurity
29) C0036415 - Sclerema Neonatorum

Infant, Newborn Trees (2):

1) M01.060.703.520 - Infant, Newborn
2) C16.614.521 - Infant, Premature, Diseases

In Vitro (3):

1) C1449561 - Embryo Culture Techniques
2) C0021135 - In Vitro
3) TxLookup - invitro

Male (144):

1) C0524605 - Accessory Sex Organs, Male
2) C0403766 - Acquired phimosis
3) C0001216 - Acrosome
4) C0001589 - Adolescent, Male
5) C0039585 - Androgen Insensitivity Syndrome
6) C0936016 - Androgen Insensitivity Syndrome, Complete
7) C0268301 - Androgen Insensitivity Syndrome, Partial
8) C0039585 - Androgen-Insensitivity Syndrome
9) C0936016 - Androgen-Insensitivity Syndrome, Complete
10) C0268301 - Androgen-Insensitivity Syndrome, Partial
11) C0268301 - Androgen-Insensitivity Syndromes, Partial
12) C0232984 - Andropause
13) C0004690 - Balanitis
14) TxLookup - boy
15) C0242788 - Breast Neoplasms, Male
16) C0006366 - Bulbourethral gland structure
17) C0006366 - Bulbourethral Glands
18) C0030848 - Cavernitides, Fibrous
19) C0030848 - Cavernitis, Fibrous
20) C0008819 - Circumcision
21) C0008819 - Circumcision, Male
22) C0008819 - Circumcisions
23) C0079341 - Circumcisions, Female
24) C0008819 - Circumcisions, Male
25) C0195076 - Clitorectomies
26) C0195076 - Clitorectomy
27) C0195076 - Clitoridectomies
28) C0195076 - Clitoridectomy
29) C0345326 - Congenital phimosis
30) C0010417 - Cryptorchidism
31) C0268919 - Disease of scrotum
32) C0268896 - Disease of seminal vesicle
33) C0030848 - Disease, Peyronie
34) C0030848 - Disease, Peyronie's
35) C0013746 - Ejaculation
36) C0013747 - Ejaculatory duct structure
37) C0013747 - Ejaculatory Ducts
38) C0678217 - Encounter due to sperm count
39) C0014533 - Epididymis
40) C0700113 - Epididymis disorders
41) C0014534 - Epididymitis
42) C0079341 - Female Circumcision
43) C0079341 - Female Circumcisions
44) C0030848 - Fibrous Cavernitides
45) C0030848 - Fibrous Cavernitis
46) C0019898 - Gay
47) C0242657 - Gays
48) C0017412 - Genital Diseases, Male
49) C0403893 - Genital Mutilation, Female
50) C0017417 - Genital Neoplasms, Male
51) C0017422 - Genital Organs, Male
52) C0017422 - Genitalia, Male
53) C0018418 - Gynecomastia
54) C0018931 - Hematocele
55) C0018931 - Hematocele of tunica vaginalis testis
56) C0242658 - HOMOSEXUALITY, MALE
57) C0020252 - Hydrocele
58) C0020646 - Hypospadias
59) C0021116 - Impotence
60) C0243000 - Impotence, Vasculogenic
61) C0030848 - Induration, Penile
62) C0030848 - Indurations, Penile
63) C0021364 - Infertility, Male
64) C0085429 - Koro
65) C0023602 - Leydig Cells
66) C0024554 - Male
67) C0008819 - Male Circumcision
68) C0008819 - Male Circumcisions
69) C0017422 - Male Genital Organs
70) C0017422 - Male Genitalia
71) C0242658 - Male Homosexuality
72) C0025266 - Male population group
73) C0153604 - Malignant neoplasm of scrotum
74) C0024554 - MAN
75) C0025266 - Men
76) C0428003 - Observation of motility of sperm
77) C0028960 - Oligospermia
78) C0029191 - Orchitis
79) C0017422 - Organs, Male Genital
80) C0030483 - Paraphimosis
81) C0243034 - Paternal Exposure
82) C0030846 - Penile Diseases
83) C0030847 - Penile Erection
84) C0030848 - Penile Induration
85) C0030848 - Penile Indurations
86) C0030849 - Penile Neoplasms
87) C0030846 - penis
88) C0030848 - Peyronie Disease
89) C0030848 - Peyronie's Disease
90) C0030848 - Peyronies Disease
91) C0031538 - Phimosis
92) C0033117 - Priapism
93) C0033572 - Prostate
94) C0033573 - Prostatectomy
95) C0033575 - Prostatic Diseases
96) C0005001 - Prostatic Hypertrophy, Benign
97) C0033578 - Prostatic Neoplasms
98) C0033581 - Prostatitis
99) C0034919 - Redundant prepuce and phimosis NOS
100) C0268301 - Reifenstein Syndrome
101) C0268301 - Reifenstein's Syndrome
102) C0268301 - Reifensteins Syndrome
103) C0035278 - Rete Testis
104) C0036471 - Scrotum
105) C0036628 - Seminal Vesicles
106) C0036629 - Seminiferous Epithelium
107) C0036630 - Seminiferous tubule structure
108) C0036630 - Seminiferous Tubules
109) C0036770 - Sertoli Cells
110) C0524605 - Sex Organs, Accessory, Male
111) C0037839 - Sperm Agglutination
112) C0037840 - Sperm Banks
113) C0037841 - Sperm Capacitation
114) C0037842 - Sperm Count
115) C0037842 - Sperm Count Procedure
116) C0037844 - Sperm Head
117) C0037846 - Sperm Maturation
118) C0037848 - Sperm Motility
119) C0037842 - Sperm number
120) C0037851 - Sperm Tail
121) C0037852 - Sperm Transport
122) C0037853 - Sperm-Ovum Interactions
123) C0037855 - Spermatic Cord
124) C0037856 - Spermatic Cord Torsion
125) C0037857 - Spermatids
126) C0037859 - Spermatocele
127) C0037863 - Spermatocytes
128) C0037864 - Spermatogenesis
129) C0037866 - Spermatogonia
130) C0037868 - Spermatozoa
131) C0023602 - Structure of interstitial cell of Leydig
132) C0035278 - Structure of rete testis
133) C0036770 - Structure of sertoli cell
134) C0036629 - Structure of spermatogenic epithelium
135) C0039584 - Testicular Diseases
136) C0936016 - Testicular Feminization

Male continued:

137) C0039590 - Testicular Neoplasms
138) C0039597 - Testis
139) C0041317 - Tuberculosis, Male Genital
140) C0038914 - Urologic Surgical Procedures, Male
141) C0042341 - Varicocele
142) C0042360 - Vas Deferens
143) C0042360 - Vas deferens structure
144) C0042421 - Vasovasostomy

Male Trees (7):

1) G08.520.084 - Ejaculation
2) C12.294 - Genital Diseases, Male
3) A05.360.444 - Genitalia, Male
4) G08.520.717 - Penile Erection
5) G08.520.310.760 - Spermatogenesis
6) A11.497.760 - Spermatozoa
7) E04.950.774.860 - Urologic Surgical Procedures, Male

Mice (306):

1) C0085087 - 3T3 Cells
2) C0025918 - AKR Mice
3) C0025918 - AKR Mice, Inbred
4) C0025918 - AKR Mouse
5) C0025918 - AKR Mouse, Inbred
6) C0025932 - Athymic Mice
7) C0025932 - Athymic Mouse
8) C0025919 - BALB C Mice
9) C0025919 - BALB C Mice, Inbred
10) C0025919 - BALB C Mouse
11) C0025919 - BALB C Mouse, Inbred
12) C1136222 - Biozzi Mice
13) C0025920 - C3H Mice
14) C0025920 - C3H Mice, Inbred
15) C0025920 - C3H Mouse
16) C0025920 - C3H Mouse, Inbred
17) C0025921 - C57BL Mice
18) C0025921 - C57BL Mice, Inbred
19) C0025921 - C57BL Mouse
20) C0025921 - C57BL Mouse, Inbred
21) C0025922 - CBA Mice
22) C0025922 - CBA Mice, Inbred
23) C0025922 - CBA Mouse
24) C0025922 - CBA Mouse, Inbred
25) C0206610 - CFTR Mice
26) C0206610 - CFTR Mice, Inbred
27) C0206610 - CFTR Mouse
28) C0206610 - CFTR Mouse, Inbred
29) C0600530 - Congenic Mice
30) C0025923 - DBA Mice
31) C0025923 - DBA Mice, Inbred
32) C0025923 - DBA Mouse
33) C0025923 - DBA Mouse, Inbred
34) C0085243 - Diabetic Mice, Non-Obese
35) C0085243 - Diabetic Mice, Nonobese
36) C0085243 - Diabetic Mouse, Non-Obese
37) C0085243 - Diabetic Mouse, Nonobese
38) C0751318 - domesticus, Mus
39) C0751318 - domesticus, Mus musculus
40) C1450009 - Founder Mice, Transgenic
41) C0025924 - Hairless Mice
42) C0025924 - Hairless Mouse
43) C0025914 - House Mice
44) C0025914 - House Mouse
45) C0025924 - HRS Mice
46) C0025924 - HRS Mice, Inbred
47) C0025924 - HRS Mouse
48) C0025924 - HRS Mouse, Inbred
49) C0162418 - Hyperglycemic Mice
50) C0162418 - Hyperglycemic Mouse
51) C0025925 - ICR Mice
52) C0025925 - ICR Mice, Inbred
53) C0025925 - ICR Mouse
54) C0025925 - ICR Mouse, Inbred
55) C0524641 - ICRC Mice, Inbred
56) C0524641 - ICRC Mouse, Inbred
57) C0085112 - Immunodeficient Mice, Severe Combined
58) C0025917 - Inbred A Mice
59) C0025917 - Inbred A Mouse
60) C0025918 - Inbred AKR Mice
61) C0025918 - Inbred AKR Mouse
62) C0025919 - Inbred BALB C Mice
63) C0025919 - Inbred BALB C Mouse
64) C0025920 - Inbred C3H Mice
65) C0025920 - Inbred C3H Mouse
66) C0025921 - Inbred C57BL Mice
67) C0025921 - Inbred C57BL Mouse
68) C0025922 - Inbred CBA Mice
69) C0025922 - Inbred CBA Mouse
70) C0206610 - Inbred CFTR Mice
71) C0206610 - Inbred CFTR Mouse
72) C0025923 - Inbred DBA Mice
73) C0025923 - Inbred DBA Mouse
74) C0025924 - Inbred HRS Mice
75) C0025924 - Inbred HRS Mouse
76) C0025925 - Inbred ICR Mice
77) C0025925 - Inbred ICR Mouse
78) C0524641 - Inbred ICRC Mice
79) C0524641 - Inbred ICRC Mouse
80) C0206535 - Inbred mdx Mice
81) C0206535 - Inbred mdx Mouse
82) C0025927 - Inbred Mouse Strain
83) C0025927 - Inbred Mouse Strains
84) C0085243 - Inbred NOD Mice
85) C0085243 - Inbred NOD Mouse
86) C0025926 - Inbred NZB Mice
87) C0025926 - Inbred NZB Mouse
88) C0242854 - Inbred SENCAR Mice
89) C0242854 - Inbred SENCAR Mouse
90) C0025927 - Inbred Strain of Mice
91) C0025927 - Inbred Strain of Mouse
92) C0025927 - Inbred Strains of Mice
93) C0025928 - Jimpy Mice
94) C0206745 - Knock-out Mice
95) C0206745 - Knockout Mice
96) C0206745 - Knockout Mouse
97) C0022827 - L Cells (Cell Line)
98) C0025929 - Laboratory Mice
99) C0025929 - Laboratory Mouse
100) C0376632 - lpr Mice, MRL
101) C0376632 - lpr Mouse, MRL
102) C0024148 - Lurcher Mice
103) C0024148 - Lurcher Mouse
104) C0206535 - mdx Mice

Mice continued:

105) C0206535 - mdx Mice, Inbred
106) C0206535 - mdx Mouse
107) C0206535 - mdx Mouse, Inbred
108) C0025914 - Mice
109) C0026200 - Mice Minute Viruses
110) C0025930 - Mice Mutant Strain
111) C0025930 - Mice Mutant Strains
112) C0025918 - Mice, AKR
113) C0025932 - Mice, Athymic
114) C0025919 - Mice, BALB C
115) C0025920 - Mice, C3H
116) C0025921 - Mice, C57BL
117) C0025922 - Mice, CBA
118) C0206610 - Mice, CFTR
119) C0600530 - Mice, Congenic
120) C0025923 - Mice, DBA
121) C0025924 - Mice, Hairless
122) C0025914 - Mice, House
123) C0025924 - Mice, HRS
124) C0162418 - Mice, Hyperglycemic
125) C0025925 - Mice, ICR
126) C0025917 - Mice, Inbred A
127) C0025918 - Mice, Inbred AKR
128) C0025919 - Mice, Inbred BALB C
129) C0025920 - Mice, Inbred C3H
130) C0025921 - Mice, Inbred C57BL
131) C0025922 - Mice, Inbred CBA
132) C0206610 - Mice, Inbred CFTR
133) C0025923 - Mice, Inbred DBA
134) C0025924 - Mice, Inbred HRS
135) C0025925 - Mice, Inbred ICR
136) C0524641 - Mice, Inbred ICRC
137) C0206535 - Mice, Inbred mdx
138) C0376632 - Mice, Inbred MRL lpr
139) C0085243 - Mice, Inbred NOD
140) C0025926 - Mice, Inbred NZB
141) C0242854 - Mice, Inbred SENCAR
142) C0025927 - Mice, Inbred Strains
143) C0025928 - Mice, Jimpy
144) C0206745 - Mice, Knock out
145) C0206745 - Mice, Knock-out
146) C0206745 - Mice, Knockout
147) C0025929 - Mice, Laboratory
148) C0024148 - Mice, Lurcher
149) C0206535 - Mice, mdx
150) C0376632 - Mice, MRL lpr
151) C0025930 - Mice, Mutant Strains
152) C0027762 - Mice, Nervous
153) C0025931 - Mice, Neurologic Mutant
154) C0025931 - Mice, Neurologic Mutants
155) C0025931 - Mice, Neurological Mutants
156) C0085243 - Mice, NOD
157) C0085243 - Mice, Non-Obese Diabetic
158) C0085243 - Mice, Nonobese Diabetic
159) C0025932 - Mice, Nude
160) C0025926 - Mice, NZB
161) C0025933 - Mice, Obese
162) C0025934 - Mice, Quaking
163) C0034921 - Mice, Reeler
164) C0085112 - Mice, SCID
165) C0086962 - Mice, SCID-hu
166) C0242854 - Mice, SENCAR
167) C0038125 - Mice, Staggerer
168) C0162416 - Mice, Swiss
169) C0025936 - Mice, Transgenic
170) C1450009 - Mice, Transgenic Founder
171) C0043086 - Mice, Weaver
172) C0025938 - Micelle
173) C0026200 - Minute Virus of Mice
174) C0026200 - Minute Virus, Mice
175) C0026200 - Minute Viruses, Mice
176) C0025914 - Mouse
177) C0025927 - Mouse Inbred Strain
178) C0025927 - Mouse Inbred Strains
179) C0025930 - Mouse Mutant Strain
180) C0025930 - Mouse Mutant Strains
181) C0025927 - Mouse Strain, Inbred
182) C0025930 - Mouse Strain, Mutant
183) C0025927 - Mouse Strains, Inbred
184) C0025930 - Mouse Strains, Mutant
185) C0025918 - Mouse, AKR
186) C0025932 - Mouse, Athymic
187) C0025919 - Mouse, BALB C
188) C0025920 - Mouse, C3H
189) C0025921 - Mouse, C57BL
190) C0025922 - Mouse, CBA
191) C0206610 - Mouse, CFTR
192) C0025923 - Mouse, DBA
193) C1450009 - Mouse, Founder, Transgenic
194) C0025924 - Mouse, Hairless
195) C0025914 - Mouse, House
196) C0025924 - Mouse, HRS
197) C0162418 - Mouse, Hyperglycemic
198) C0025925 - Mouse, ICR
199) C0025917 - Mouse, Inbred A
200) C0025918 - Mouse, Inbred AKR
201) C0025919 - Mouse, Inbred BALB C
202) C0025920 - Mouse, Inbred C3H
203) C0025921 - Mouse, Inbred C57BL
204) C0025922 - Mouse, Inbred CBA
205) C0206610 - Mouse, Inbred CFTR
206) C0025923 - Mouse, Inbred DBA
207) C0025924 - Mouse, Inbred HRS
208) C0025925 - Mouse, Inbred ICR
209) C0524641 - Mouse, Inbred ICRC
210) C0206535 - Mouse, Inbred mdx
211) C0376632 - Mouse, Inbred MRL lpr
212) C0085243 - Mouse, Inbred NOD
213) C0025926 - Mouse, Inbred NZB
214) C0242854 - Mouse, Inbred SENCAR
215) C0025927 - Mouse, Inbred Strain
216) C0206745 - Mouse, Knockout
217) C0025929 - Mouse, Laboratory
218) C0024148 - Mouse, Lurcher
219) C0206535 - Mouse, mdx
220) C0376632 - Mouse, MRL lpr
221) C0025930 - Mouse, Mutant Strain
222) C0027762 - Mouse, Nervous
223) C0025931 - Mouse, Neurologic Mutant
224) C0025931 - Mouse, Neurological Mutant
225) C0085243 - Mouse, NOD
226) C0085243 - Mouse, Non-Obese Diabetic
227) C0085243 - Mouse, Nonobese Diabetic
228) C0025932 - Mouse, Nude
229) C0025926 - Mouse, NZB
230) C0025933 - Mouse, Obese
231) C0034921 - Mouse, Reeler
232) C0085112 - Mouse, SCID
233) C0086962 - Mouse, SCID hu
234) C0086962 - Mouse, SCID-hu
235) C0242854 - Mouse, SENCAR
236) C0038125 - Mouse, Staggerer
237) C0162416 - Mouse, Swiss
238) C0025936 - Mouse, Transgenic
239) C0043086 - Mouse, Weaver
240) C0376632 - MRL lpr Mice
241) C0376632 - MRL lpr Mouse
242) C0019185 - Murine hepatitis virus
243) C0026809 - Mus

Mice continued:

244) C0751318 - Mus domesticus
245) C0025914 - Mus musculus
246) C0751318 - Mus musculus domesticus
247) C0751318 - musculus domesticus, Mus
248) C0025931 - Mutant Mice, Neurologic
249) C0025930 - Mutant Mouse Strain
250) C0025930 - Mutant Mouse Strains
251) C0025931 - Mutant Mouse, Neurologic
252) C0025930 - Mutant Strain Mouse
253) C0025930 - Mutant Strain of Mouse
254) C0025930 - Mutant Strains Mice
255) C0025930 - Mutant Strains of Mice
256) C0027762 - Nervous Mice
257) C0027762 - Nervous Mouse
258) C0025931 - Neurologic Mutant Mice
259) C0025931 - Neurologic Mutant Mouse
260) C0025931 - Neurological Mutant Mouse
261) C0085243 - NOD Mice
262) C0085243 - NOD Mice, Inbred
263) C0085243 - NOD Mouse
264) C0085243 - NOD Mouse, Inbred
265) C0085243 - Non Obese Diabetic Mice
266) C0085243 - Non Obese Diabetic Mouse
267) C0085243 - Non-Obese Diabetic Mice
268) C0085243 - Non-Obese Diabetic Mouse
269) C0085243 - Nonobese Diabetic Mice
270) C0085243 - Nonobese Diabetic Mouse
271) C0025932 - Nude Mice
272) C0025932 - Nude Mouse
273) C0025926 - NZB Mice
274) C0025926 - NZB Mice, Inbred
275) C0025926 - NZB Mouse
276) C0025926 - NZB Mouse, Inbred
277) C0025933 - Obese Mice
278) C0025933 - Obese Mouse
279) C0025934 - Quaking Mice
280) C0034921 - Reeler Mice
281) C0034921 - Reeler Mouse
282) C0086962 - SCID hu Mice
283) C0085112 - SCID Mice
284) C0085112 - SCID Mouse
285) C0086962 - SCID-hu Mice
286) C0086962 - SCID-hu Mouse
287) C0242854 - SENCAR Mice
288) C0242854 - SENCAR Mice, Inbred
289) C0242854 - SENCAR Mouse
290) C0242854 - SENCAR Mouse, Inbred
291) C0085112 - Severe Combined Immunodeficient Mice
292) C0038125 - Staggerer Mice
293) C0038125 - Staggerer Mouse
294) C0025930 - Strain Mouse, Mutant
295) C0025927 - Strain, Inbred Mouse
296) C0025930 - Strain, Mutant Mouse
297) C0025930 - Strains Mice, Mutant
298) C0025927 - Strains, Inbred Mouse
299) C0025930 - Strains, Mutant Mouse
300) C0162416 - Swiss Mice
301) C0162416 - Swiss Mouse
302) C1450009 - Transgenic Founder Mice
303) C0025936 - Transgenic Mice
304) C0025936 - Transgenic Mouse
305) C0043086 - Weaver Mice
306) C0043086 - Weaver Mouse

Mice Trees (3):

1) A11.251.210.700 - 3T3 Cells
2) A11.251.210.505 - L Cells (Cell Line)
3) B01.150.900.649.865.635.505.500 - Mice

Pregnancy (159):

1) C0000786 - Abortion
2) C0000793 - Abortion on Demand
3) C0000806 - Abortion, Eugenic
4) C0000809 - Abortion, Habitual
5) C0000814 - Abortion, Missed
6) C0000817 - Abortion, Septic
7) C0000821 - Abortion, Threatened
8) C0000823 - Abortion, Veterinary
9) C0000820 - Abortions, Therapeutic
10) C0000832 - Abruptio Placentae
11) C0342008 - Amniotic fluid pulmonary embolism
12) C0006157 - Breech Presentation
13) C0600454 - Cervical Ripening
14) C0007871 - Cervix Incompetence
15) TxLookup - cesarean
16) C0008495 - Chorioamnionitis
17) C0008497 - Choriocarcinoma
18) C0008509 - Chorionic Villi Sampling
19) C0887804 - Circulation, Fetal-Placental
20) C0887804 - Circulation, Fetoplacental
21) C0887803 - Circulation, Placental
22) C0242622 - Circulation, Uteroplacental
23) C0887804 - Circulations, Fetal-Placental
24) C0887804 - Circulations, Fetoplacental
25) C0010095 - Corpus Luteum Maintenance
26) C0085207 - Diabetes, Gestational
27) C0013418 - Dystocia
28) C0013537 - Eclampsia
29) C0032914 - Edema Proteinuria Hypertension Gestosis
30) C0032914 - Edema-Proteinuria-Hypertension Gestosis
31) C0013927 - Embolism, Amniotic Fluid
32) C0013936 - Embryonic Development
33) C0032914 - EPH Complex
34) C0032914 - EPH Gestosis
35) C0032914 - EPH Toxemia
36) C0032914 - EPH Toxemias
37) C0018811 - Fetal Heart Rate
38) C0018811 - Fetal Heart Rates
39) C0015944 - Fetal Membranes, Premature Rupture
40) C0887804 - Fetal Placental Circulation
41) C0887804 - Fetal-Placental Circulation
42) C0887804 - Fetal-Placental Circulations
43) C0015958 - Fetofetal Transfusion
44) C0015959 - Fetomaternal Transfusion
45) C0887804 - Fetoplacental Circulation
46) C0887804 - Fetoplacental Circulations
47) C0235660 - Galactorrhea
48) C0032914 - Gestosis, Edema-Proteinuria-Hypertension
49) C0032914 - Gestosis, EPH
50) C0032914 - Gestosis, Hypertension-Edema-Proteinuria
51) C0032914 - Gestosis, Proteinuria-Edema-Hypertension
52) C0018811 - Heart Rate, Fetal
53) C0018811 - Heart Rates, Fetal
54) C0162739 - HELLP Syndrome
55) C0019343 - Herpes Gestationis
56) C0242786 - High Risk Pregnancy
57) C0242786 - High-Risk Pregnancies
58) C0242786 - High-Risk Pregnancy

Pregnancy continued:

59) C0020217 - Hydatidiform Mole
60) C0008493 - Hydatidiform Mole, Invasive
61) C0020450 - Hyperemesis Gravidarum
62) C0032914 - Hypertension Edema Proteinuria Gestosis
63) C0340274 - Hypertension, Pregnancy-Induced
64) C0032914 - Hypertension-Edema-Proteinuria Gestosis
65) C0600107 - Incomplete legal abortion
66) C0000810 - Incomplete spontaneous abortion
67) C0008495 - Infection of amniotic sac and membranes
68) C0022864 - Labor (Childbirth)
69) C0022865 - Labor Complications
70) C0022868 - Labor Onset
71) C0474368 - Labor Pain
72) C0022869 - Labor Presentation
73) C0022871 - Labor Stage, First
74) C0022872 - Labor Stage, Second
75) C0022873 - Labor Stage, Third
76) C0022873 - Labor Stages, Third
77) C0022875 - Labor, Induced
78) C0022876 - Labor, Premature
79) C0022873 - Labor, Third Stage
80) C0024929 - Maternal-Fetal Exchange
81) C0312416 - Morning Sickness
82) C0079924 - Oligohydramnios
83) C0030563 - PARITY
84) C0030612 - Parturient Paresis
85) C0085547 - Phenylketonuria, Maternal
86) C0032044 - Placenta Accreta
87) C0032045 - Placenta Diseases
88) C0032046 - Placenta Praevia
89) C0242669 - Placenta, Retained
90) C0032051 - Placental Insufficiency
91) C0032058 - Placentation
92) C0020224 - Polyhydramnios
93) C1446947 - Postimplantation Embryo Development
94) TxLookup - Postimplantation Phase
95) C0032797 - Postpartum Hemorrhage
96) C0032914 - Pre Eclampsia
97) C0032914 - Pre-Eclampsia
98) C0032914 - Preeclampsia
99) C0242786 - Pregnancies, High-Risk
100) C0032961 - Pregnancy
101) C0032962 - Pregnancy Complications
102) C0032963 - Pregnancy Complications, Cardiovascular
103) C0032964 - Pregnancy Complications, Hematologic
104) C0032965 - Pregnancy Complications, Infectious
105) C0032966 - Pregnancy Complications, Neoplastic
106) C0162494 - Pregnancy Complications, Parasitic
107) C0032968 - Pregnancy in Adolescence
108) C0032969 - Pregnancy in Diabetics
109) C0032971 - Pregnancy Maintenance
110) C0032972 - Pregnancy Outcome
111) C0032975 - Pregnancy Rate
112) C0242836 - Pregnancy Reduction, Multifetal
113) C0032914 - Pregnancy Toxemia
114) C0032914 - Pregnancy Toxemias
115) C0032984 - Pregnancy, Abdominal
116) C0032986 - Pregnancy, Animal
117) C0032987 - Pregnancy, Ectopic
118) C0242786 - Pregnancy, High Risk
119) C0242786 - Pregnancy, High-Risk
120) C0032989 - Pregnancy, Multiple
121) C0032993 - Pregnancy, Prolonged
122) C0032994 - Pregnancy, Tubal
123) C0041747 - Pregnancy, Unplanned
124) C0032995 - Pregnancy, Unwanted
125) C0549206 - Pregnant
126) C0033011 - Pregnant Women
127) C1446949 - Preimplantation Embryo Development
128) TxLookup - Preimplantation Phase
129) C0151526 - Premature Birth
130) C0033054 - Prenatal Exposure Delayed Effects
131) C0032914 - Proteinuria Edema Hypertension Gestosis
132) C0032914 - Proteinuria-Edema-Hypertension Gestosis
133) C0018811 - Rate, Fetal Heart
134) C0018811 - Rates, Fetal Heart
135) C0000786 - Spontaneous abortion
136) C0022873 - Stage, Third Labor
137) C0022873 - Stages, Third Labor
138) C0038822 - Superfetation
139) C0000811 - Termination of pregnancy
140) C0000820 - Therapeutic Abortion
141) C0000820 - Therapeutic Abortions
142) C0022873 - Third Labor Stage
143) C0022873 - Third Labor Stages
144) C0022873 - Third Stage Labor
145) C0040348 - Tocolysis
146) C0032914 - Toxemia, EPH
147) C0032914 - Toxemia, Pregnancy
148) C0032914 - Toxemias, EPH
149) C0032914 - Toxemias, Pregnancy
150) C0040862 - Trial of Labor
151) C0041182 - Trophoblastic Neoplasms
152) C0206666 - Trophoblastic Tumor, Placental Site
153) C0080265 - Ultrasonography, Prenatal
154) C0032995 - Unwanted pregnancy
155) C0042130 - Uterine Contraction
156) C0042135 - Uterine Inertia
157) C0040345 - Uterine Monitoring
158) C0042143 - Uterine Rupture
159) C0242622 - Uteroplacental Circulation

Pregnancy Trees (5):

1) G09.330.553.400.509.430 - Heart Rate, Fetal
2) G08.520.734 - Postpartum Period
3) G08.520.769 - Pregnancy
4) C13.703 - Pregnancy Complications
5) G08.520.769.498 - Pregnancy, Animal

Rabbits (1):

1) C0034493 - Rabbit

Rats (238):

1) C0034698 - ACI Rat
2) C0034698 - ACI Rat, Inbred
3) C0034698 - ACI Rats
4) C0034698 - ACI Rats, Inbred
5) C0034713 - Athymic Rat
6) C0034713 - Athymic Rats
7) C0524710 - August Rat
8) C0524710 - August Rats

Rats continued:

9) C0034699 - BB Rat
10) C0034699 - BB Rat, Inbred
11) C0034699 - BB Rats
12) C0034699 - BB Rats, Inbred
13) C0034699 - BB Wistar Rats
14) C0034699 - Bio Breeding Inbred Rats
15) C0034699 - Bio-Breeding Inbred Rat
16) C0034699 - Bio-Breeding Inbred Rats
17) C0034700 - BN Rat
18) C0034700 - BN Rat, Inbred
19) C0034700 - BN Rats
20) C0034700 - BN Rats, Inbred
21) C0034694 - Brattleboro Rats
22) C0034701 - BUF Rat
23) C0034701 - BUF Rat, Inbred
24) C0034701 - BUF Rats
25) C0034701 - BUF Rats, Inbred
26) C0034701 - Buffalo Rats, Inbred
27) C0034703 - CDF Rat, Inbred
28) C0034703 - CDF Rats, Inbred
29) C0600547 - Cinnamon Rats, Long-Evans
30) C0600534 - Dahl Hypertensive Rats
31) C0600533 - Dahl Rats
32) C0600533 - Dahl Rats, Inbred
33) C0600535 - Dahl Salt Resistant Rats
34) C0600534 - Dahl Salt Sensitive Rats
35) C0600535 - Dahl Salt-Resistant Rats
36) C0600534 - Dahl Salt-Sensitive Rats
37) C0324537 - Evans Rats, Long
38) C0034703 - F344 Rat
39) C0034703 - F344 Rat, Inbred
40) C0034703 - F344 Rats
41) C0034703 - F344 Rats, Inbred
42) C0600548 - Fatty Rats, Otsuka-Long-Evans-Tokushima
43) C0034703 - Fischer Rats
44) C0034696 - Gunn Rats
45) C0242589 - Holtzman Rats
46) C0600534 - Hypertensive Rats, Dahl
47) C0034698 - Inbred ACI Rat
48) C0034698 - Inbred ACI Rats
49) C0034699 - Inbred BB Rat
50) C0034699 - Inbred BB Rats
51) C0034700 - Inbred BN Rat
52) C0034700 - Inbred BN Rats
53) C0034701 - Inbred BUF Rat
54) C0034701 - Inbred BUF Rats
55) C0034701 - Inbred Buffalo Rats
56) C0034703 - Inbred CDF Rat
57) C0034703 - Inbred CDF Rats
58) C0600533 - Inbred Dahl Rats
59) C0034703 - Inbred F344 Rat
60) C0034703 - Inbred F344 Rats
61) C0600547 - Inbred LEC Rat
62) C0600547 - Inbred LEC Rats
63) C0034704 - Inbred Lew Rat
64) C0034704 - Inbred Lew Rats
65) C0034704 - Inbred Lewis Rats
66) C0600548 - Inbred OLETF Rat
67) C0600548 - Inbred OLETF Rats
68) C0034706 - Inbred Rat Strain
69) C0034706 - Inbred Rat Strains
70) C0034699 - Inbred Rat, Bio-Breeding
71) C0034699 - Inbred Rats, Bio-Breeding
72) C0034705 - Inbred SHR Rat
73) C0034705 - Inbred SHR Rats
74) C0034706 - Inbred Strain of Rat
75) C0034706 - Inbred Strain of Rats
76) C0034706 - Inbred Strain Rat
77) C0034706 - Inbred Strain Rats
78) C0034706 - Inbred Strains of Rats
79) C0034706 - Inbred Strains Rat
80) C0034706 - Inbred Strains Rats
81) C0034707 - Inbred WF Rat
82) C0034707 - Inbred WF Rats
83) C0034709 - Inbred WKY Rat
84) C0034709 - Inbred WKY Rats
85) C0086893 - Laboratory Rat
86) C0086893 - Laboratory Rats
87) C0600547 - LEC Rat, Inbred
88) C0600547 - LEC Rats, Inbred
89) C0034704 - Lew Rat
90) C0034704 - Lew Rat, Inbred
91) C0034704 - Lew Rats
92) C0034704 - Lew Rats, Inbred
93) C0034704 - Lewis Rats, Inbred
94) C0600547 - Long Evans Cinnamon Rats
95) C0324537 - Long Evans Rats
96) C0600547 - Long-Evans Cinnamon Rats
97) C0324537 - Long-Evans Rats
98) C0034711 - Mutant Strains Rat
99) C0034711 - Mutant Strains Rats
100) C0034693 - Norway Rats
101) C0034713 - Nude Rat
102) C0034713 - Nude Rats
103) C0600548 - OLETF Rat, Inbred
104) C0600548 - OLETF Rats, Inbred
105) C0600548 - Otsuka Long Evans Tokushima Fatty Rats
106) C0600548 - Otsuka Long Evans Tokushima Rats
107) C0600548 - Otsuka-Long-Evans-Tokushima Fatty Rats
108) C0600548 - Otsuka-Long-Evans-Tokushima Rats
109) C0085262 - PC12 Cells
110) C0034693 - Rat
111) C0034706 - Rat Inbred Strain
112) C0034706 - Rat Inbred Strains
113) C0034706 - Rat Strain, Inbred
114) C0034706 - Rat Strains, Inbred
115) C0034698 - Rat, ACI
116) C0034713 - Rat, Athymic
117) C0524710 - Rat, August
118) C0034699 - Rat, BB
119) C0034699 - Rat, Bio-Breeding Inbred
120) C0034700 - Rat, BN
121) C0034701 - Rat, BUF
122) C0034703 - Rat, F344
123) C0034698 - Rat, Inbred ACI
124) C0034699 - Rat, Inbred BB
125) C0034700 - Rat, Inbred BN
126) C0034701 - Rat, Inbred BUF
127) C0034703 - Rat, Inbred CDF
128) C0034703 - Rat, Inbred F344
129) C0600547 - Rat, Inbred LEC
130) C0034704 - Rat, Inbred Lew
131) C0600548 - Rat, Inbred OLETF
132) C0034705 - Rat, Inbred SHR
133) C0034706 - Rat, Inbred Strain
134) C0034706 - Rat, Inbred Strains
135) C0034707 - Rat, Inbred WF
136) C0034709 - Rat, Inbred WKY
137) C0086893 - Rat, Laboratory
138) C0034704 - Rat, Lew
139) C0034711 - Rat, Mutant Strains
140) C0034713 - Rat, Nude
141) C0034705 - Rat, SHR
142) C0034705 - Rat, Spontaneously Hypertensive
143) C0034707 - Rat, WF
144) C0034709 - Rat, WKY
145) C0034706 - Rats Inbred Strain
146) C0034706 - Rats Inbred Strains
147) C0034698 - Rats, ACI

Rats continued:

148) C0034713 - Rats, Athymic
149) C0524710 - Rats, August
150) C0034699 - Rats, BB
151) C0034699 - Rats, BB Wistar
152) C0034699 - Rats, Bio-Breeding Inbred
153) C0034700 - Rats, BN
154) C0034694 - Rats, Brattleboro
155) C0034701 - Rats, BUF
156) C0600533 - Rats, Dahl
157) C0600534 - Rats, Dahl Hypertensive
158) C0600535 - Rats, Dahl Salt-Resistant
159) C0600534 - Rats, Dahl Salt-Sensitive
160) C0034703 - Rats, F344
161) C0034703 - Rats, Fischer
162) C0034696 - Rats, Gunn
163) C0242589 - Rats, Holtzman
164) C0034698 - Rats, Inbred A x C 9935 Irish
165) C0034698 - Rats, Inbred ACI
166) C0034699 - Rats, Inbred BB
167) C0034700 - Rats, Inbred BN
168) C0034700 - Rats, Inbred Brown Norway
169) C0034701 - Rats, Inbred BUF
170) C0034701 - Rats, Inbred Buffalo
171) C0034703 - Rats, Inbred CDF
172) C0600533 - Rats, Inbred Dahl
173) C0034703 - Rats, Inbred F344
174) C0034703 - Rats, Inbred Fischer 344
175) C0034703 - Rats, Inbred Fisher 344
176) C0600547 - Rats, Inbred LEC
177) C0034704 - Rats, Inbred Lew
178) C0034704 - Rats, Inbred Lewis
179) C0600547 - Rats, Inbred Long Evans Cinnamon
180) C0600547 - Rats, Inbred Long-Evans Cinnamon
181) C0600548 - Rats, Inbred OLETF
182) C0034705 - Rats, Inbred SHR
183) C0034706 - Rats, Inbred Strain
184) C0034706 - Rats, Inbred Strains
185) C0034707 - Rats, Inbred WF
186) C0034707 - Rats, Inbred Wistar Furth
187) C0034709 - Rats, Inbred WKY
188) C0086893 - Rats, Laboratory
189) C0034704 - Rats, Lew
190) C0324537 - Rats, Long Evans
191) C0324537 - Rats, Long-Evans
192) C0600547 - Rats, Long-Evans Cinnamon
193) C0034711 - Rats, Mutant Strains
194) C0034693 - Rats, Norway
195) C0034713 - Rats, Nude
196) C0600548 - Rats, Otsuka-Long-Evans-Tokushima
197) C0600548 - Rats, Otsuka-Long-Evans-Tokushima Fatty
198) C0034705 - Rats, SHR
199) C0034705 - Rats, Spontaneously Hypertensive
200) C0034715 - Rats, Sprague Dawley
201) C0034715 - Rats, Sprague-Dawley
202) C0034707 - Rats, WF
203) C0034716 - Rats, Wistar
204) C0034707 - Rats, Wistar Furth
205) C0034709 - Rats, Wistar Kyoto
206) C0034709 - Rats, WKY
207) C0034719 - Rats, Zucker
208) C0034721 - Rattus
209) C0034693 - Rattus norvegicus
210) C0600535 - Salt-Resistant Rats, Dahl
211) C0600534 - Salt-Sensitive Rats, Dahl
212) C0034705 - SHR Rat
213) C0034705 - SHR Rat, Inbred
214) C0034705 - SHR Rats
215) C0034705 - SHR Rats, Inbred
216) C0034705 - Spontaneously Hypertensive Rat
217) C0034705 - Spontaneously Hypertensive Rats
218) C0034715 - Sprague Dawley Rats
219) C0034715 - Sprague-Dawley Rats
220) C0034706 - Strain Rat, Inbred
221) C0034706 - Strain Rats, Inbred
222) C0034706 - Strain, Inbred Rat
223) C0034711 - Strains Rat, Mutant
224) C0034711 - Strains Rats, Mutant
225) C0034706 - Strains, Inbred Rat
226) C0034707 - WF Rat
227) C0034707 - WF Rat, Inbred
228) C0034707 - WF Rats
229) C0034707 - WF Rats, Inbred
230) C0034707 - Wistar Furth Rats
231) C0034709 - Wistar Kyoto Rats
232) C0034716 - Wistar Rats
233) C0034699 - Wistar Rats, BB
234) C0034709 - WKY Rat
235) C0034709 - WKY Rat, Inbred
236) C0034709 - WKY Rats
237) C0034709 - WKY Rats, Inbred
238) C0034719 - Zucker Rats

Rats Trees (1):

1) B01.150.900.649.865.635.505.700 - Rats

Sheep (6):

1) C0027345 - Nairobi Sheep Disease
2) C0032306 - Pneumonia, Progressive Interstitial, of Sheep
3) C0034049 - Pulmonary Adenomatosis, Ovine
4) C0036946 - Sheep Diseases
5) C0024003 - Swayback
6) C0080323 - Visna

Sheep Trees (1):

1) C22.836 - Sheep Diseases

Swine (14):

1) C0001752 - African Swine Fever
2) C0019841 - Classical Swine Fever
3) C0013605 - Edema Disease of Swine
4) C0014073 - Encephalomyelitis, Enzootic Porcine
5) C0014521 - Epidermitis, Exudative, of Swine
6) C0017162 - Gastroenteritis, Transmissible, of Swine
7) C0242598 - LLC-PK1 Cells
8) C0376538 - Porcine Reproductive and Respiratory Syndrome
9) C0039006 - Swine Diseases
10) C0039007 - Swine Erysipelas
11) C0019841 - Swine Fever
12) C0039010 - Swine Vesicular Disease
13) C0039011 - Swine, Miniature
14) C0042584 - Vesicular Exanthema of Swine

Swine Trees (2):

1) A11.251.210.520 - LLC-PK1 Cells
2) C22.905 - Swine Diseases

United States (54):

1) C0002455 - American Cancer Society
2) C0002456 - American Dental Association
3) C0002458 - American Heart Association
4) C0002459 - American Hospital Association
5) C0002461 - American Medical Association
6) C0002463 - American Nurses' Association
7) C0078936 - American Speech-Language-Hearing Association
8) C0007670 - Centers for Disease Control and Prevention (U.S.)
9) C0009434 - Commission on Professional and Hospital Activities
10) C0282438 - Consensus Development Conference, NIH [Publication Type]
11) C0376631 - Employee Retirement Income Security Act
12) C0018727 - Health Planning
13) C0018764 - Health system plans
14) C0018763 - Health Systems Agencies
15) C0020007 - Hospitals, Federal
16) C0020012 - Hospitals, Military
17) C0021621 - Institute of Medicine (U.S.)
18) C0022405 - Joint Commission on Accreditation of Healthcare Organizations
19) C0025071 - Medicaid
20) C0025140 - MEDLARS
21) C0025141 - MEDLINE
22) C0027446 - National Academy of Sciences (U.S.)
23) C0027447 - National Center for Health Care Technology
24) C0027450 - National Center for Health Statistics (U.S.)
25) C0027454 - National Health Insurance, United States
26) C0027456 - National Health Planning Information Center
27) C0027463 - National Institute for Occupational Safety and Health
28) C0027466 - National Institute of Mental Health (U.S.)
29) C0027468 - National Institutes of Health (U.S.)
30) C0027470 - National Library of Medicine (U.S.)
31) C0085291 - National Practitioner Data Bank
32) C0600418 - Patient Self-Determination Act
33) C0031826 - Physician Payment Review Commission
34) C0033518 - Prospective Payment Assessment Commission
35) C0038192 - State Health Planning and Development Agencies
36) C0038194 - State Health Plans
37) C0080268 - United States Agency for Healthcare Research and Quality
38) C0041718 - United States Centers for Medicare and Medicaid Services
39) C0085410 - United States Department of Agriculture
40) C0041735 - United States Department of Veterans Affairs
41) C0041711 - United States Dept. of Health and Human Services
42) C0041712 - United States Environmental Protection Agency
43) C0041713 - United States Federal Trade Commission
44) C0041714 - United States Food and Drug Administration
45) C0041720 - United States Health Resources and Services Administration
46) C0085141 - United States Indian Health Service
47) C0242776 - United States National Aeronautics and Space Administration
48) C0041731 - United States Occupational Safety and Health Administration
49) C0041732 - United States Office of Economic Opportunity
50) C0206601 - United States Office of Research Integrity
51) C0041733 - United States Office of Technology Assessment
52) C0041734 - United States Public Health Service
53) C0282680 - United States Social Security Administration
54) C0041704 - United States Substance Abuse and Mental Health Services Administration

United States Trees (4):

1) N03.219.521.576.343.840 - Medicare
2) N03.540.452.508 - State Health Planning and Development Agencies
3) N03.540.427.300 - United States Dept. of Health and Human Services
4) N03.540.427.550 - United States Office of Technology Assessment

Cercopithecus aethiops (4):

1) C0026438 - Cercopithecus aethiops
2) C1438037 - MBD-205 protein, Cercopithecus aethiops
3) C0638274 - osteoclast functional antigen, Cercopithecus aethiops
4) C0042542 - Vero Cells

Appendix M – MeSH SubHeading Treecode Triggers List

economics (1):
1) N03.219 - Economics

ethics (1):
1) K01.316 - Ethics

genetics (5):
1) G13 - Genetic Phenomena
2) G05 - Genetic Processes
3) N02.421.308 - Genetic Services
4) G14 - Genetic Structures
5) G01.273.343 - Genetics

immunology (3):
1) D12.776.124.486.485.114:D12.776.124.790.651.114:D12.776.377.715.548.114 - Antibodies
2) D23.050 - Antigens
3) G04.610 - Immunity

pharmacokinetics (1):
1) G12.091.690.140 - Biotransformation

radiography (1):
1) E01.370.350.700 - Radiography

radionuclide imaging (1):
1) E01.370.384.730 - Radionuclide Imaging

radiotherapy (1):
1) E02.815 - Radiotherapy

rehabilitation (1):
1) E02.831 - Rehabilitation

surgery (1):
1) E04 - Surgical Procedures, Operative

transmission (1):
1) G03.850.310 - Disease Transmission

transplantation (9):
1) E04.936.225 - Cell Transplantation
2) E04.936.337 - Cold Ischemia
3) E04.936.450 - Organ Transplantation
4) E04.936.580 - Tissue Transplantation
5) E04.936.664 - Transplantation, Autologous
6) E04.936.764 - Transplantation, Heterologous
7) E04.936.800 - Transplantation, Heterotopic
8) E04.936.864 - Transplantation, Homologous
9) E04.936.932 - Warm Ischemia

ultrasonography (1):
1) E01.370.350.850 - Ultrasonography

virology (1):
1) G04.185.515.880 - Viral Physiology

Appendix N – Special Publication Type List

Publication Type	Recommendation Limit
Review	14
News	14
Editorial	9
Letter	8