

Explicitet Advanced Tutorial: Create New Metadata within Explicitet

"Explicitet" is from the Latin: explain, unfold, extend, set forth, exhibit, disentangle

A brief introduction to program capabilities and functions for new
users of the Explicitet software



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The data used in this tutorial come from an analysis of 16S ribosomal RNA gene sequences obtained from many distinct skin sites of healthy humans (Grice EA, *et al.* (2009) Topographical and Temporal Diversity of the Human Skin Microbiome. *Science* 324(5931): 1190–1192). For the purposes of this tutorial, we will create mock metadata. Therefore, the following metadata that we will create is completely artificial and does not represent the findings of the original study.

I. Create New Metadata within Explicit

Instead of importing metadata from an outside source, the user can create new metadata within Explicit. To begin, open the Tutorial_HSM project (created in the basic tutorial) by simply double-clicking on the project file.

Go to “Workspace 1” by clicking the radio button next to the **Workspace** field
Select “Workspace 1” from the drop down

The screenshot shows the Explicit software interface. The top menu bar includes File, Edit, Data, Group, Tools, View, and Help. The Project field is set to Tutorial_HSM. The Workspace dropdown is set to Workspace 1, and the Current Filter is Back+Umbilicus. The OTU Start is 1, OTU Width is 2, and OTU Show Last is checked. The Hierarchy Level is set to 3. The OTU table shows counts for various bacterial groups across different samples. The OTU list at the bottom shows the full taxonomic path for each OTU.

	Total	back:HV1-1-BaCSc	back:HV10-BaCSc	back:HV2-1-BaCSc	back:HV3-1-BaCSc	back:HV4-1-BaCSc	back:HV5-BaCSc
root	6670	305	289	354	180	296	541
Bacteria	6670	305	289	354	180	296	541
Actinobacteria	4029	295	235	331	165	254	514
Bacteroidetes	513	0	4	6	7	8	1
Candidate-division-TM7	2	0	0	0	1	0	0
Cyanobacteria	10	0	0	0	0	0	0
Firmicutes	1160	10	7	10	1	7	17
Fusobacteria	27	0	0	0	0	0	0
Proteobacteria	926	0	43	7	6	27	9
Synergistetes	3	0	0	0	0	0	0

A. Open the Existing Metadata

Data → Metadata

A window with three sections will open

- The left pane: **Defined Metadata**, the right pane: **Assigned Metadata**, the bottom area: **Metadata Definition**. The bottom section, **Metadata Definition**, allows creation of new metadata fields.

Metadata

☒ All Libraries ☐ Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRsw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name:

Type:

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

Now we will create a new metadata category and assign a value to each library.

B. Create Enumerated Metadata that is 8 characters or less

For this example, we will create a new metadata category of “Sex”, and we will assign each library as derived from either a “Male” or a “Female”. Since there are only a couple, distinct metadata values for the new definition, we will enter them as enumerated.

Type “Sex” into **Name** field

In **Type** drop-down, choose **String that is 8 characters or less** (words or strings of text 8 characters or less)

Enter “Female” under **Enumerated Values**

Click **Add Value**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Female

Add Value Add

Replace Delete Clear

Values

<New>

Delete Value Clear Values

"Female" now appears in the **Values** list

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Female

Add Value Add

Replace Delete Clear

Values

Female

Enter "Male" under **Enumerated Values**
Click **Add Value**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Male

Female

<New>

Add Value

Add

Replace

Delete

Clear

Delete Value

Clear Values

"Female" and "Male" now appear in the **Values** list

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Male

Female

<New>

Add Value

Add

Replace

Delete

Clear

Delete Value

Clear Values

Click **Add** button to the right of the **Metadata Definition** section to add "Sex" to the **Defined Metadata** list

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status:

Enumerated Values: Optional

Male

Add Value

Values

Female

Male

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

This category is now defined and can be edited so that it is associated with each library

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 0	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape	Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape	Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape	Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab	Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

Select "Sex" in the **Defined Metadata** pane

Click **Add** button between panes

The screenshot shows the Metadata application interface. On the left, the 'Defined Metadata' pane lists 'Sex' as a new entry. In the center, between the 'Defined Metadata' and 'Assigned Metadata' panes, there is an 'Add ->' button highlighted with a red arrow. The 'Assigned Metadata' pane on the right shows a table with columns: Library Name, Anatomy, Microenvironment, SampleType, and Symmetry. Below the panes, the 'Metadata Definition' section shows the configuration for 'Sex', including a list of values: Female, Male, and <New>.

A “Sex” column now appears alphabetically in the **Assigned Metadata** pane

The screenshot shows the Metadata application interface after the 'Sex' column has been added. The 'Assigned Metadata' pane now includes a 'Sex' column, which is circled in red. The first cell in this column contains the value 'none'. The 'Metadata Definition' section at the bottom remains the same, showing the configuration for 'Sex'.

From the drop-down selector in the first cell in the column, choose “Female”

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 1	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	none	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Female	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape		Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab		Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape		Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape		Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape		Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab		Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape		Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab		Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab		Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape		Center
17 HV5-UmCSw	umbilicus	Moist	Swab		Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab		Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value Delete Value Clear Values

Add Replace Delete Clear

Click on the second cell in the column
A drop down selector will appear
Select "Female"

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 1	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	umbilicus	Moist	Swab	none	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	none	Center
4 HV10-UmCSw	umbilicus	Moist	Swab	Female	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape		Right
6 HV2-1-AcRSw	antecubital fossa	Moist	Swab		Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape		Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape		Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape		Center
10 HV2-1-UmCSw	umbilicus	Moist	Swab		Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape		Center
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab		Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab		Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape		Center
17 HV5-UmCSw	umbilicus	Moist	Swab		Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab		Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value Delete Value Clear Values

Add Replace Delete Clear

Instead of selecting the corresponding value for each library one-by-one, “Female” can be copied and pasted into multiple cells.

C. Copy and Paste Functions

While the second cell in the “Sex” column is selected, click **Copy**

The screenshot shows the Metadata application window. On the left, the 'Defined Metadata' list includes 'Sex' at index 5. The main area displays the 'Assigned Metadata' table with columns: Library Name, Anatomy, Microenvironment, SampleType, Sex, and Symmetry. The 'Sex' column has a dropdown menu open showing 'Female' selected. A red arrow points to the 'Copy' button located below the table. At the bottom, the 'Metadata Definition' panel shows the 'Sex' metadata definition with a list of values: Female, Male, and <New>.

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
HV1-1-BaCSc	back	Sebaceous	Scrape	Female	Center
HV1-1-UmCSw	umbilicus	Moist	Swab	Female	Center
HV10-BaCSc	back	Sebaceous	Scrape		Center
HV10-UmCSw	umbilicus	Moist	Swab		Center
HV2-1-AcRSc	antecubital fossa	Moist	Scrape		Right
HV2-1-AcRSw	antecubital fossa	Moist	Swab		Right
HV2-1-AIRSc	alar crease	Sebaceous	Scrape		Right
HV2-1-BaCSc	back	Sebaceous	Scrape		Center
HV2-1-GcCSc	gluteal crease	Moist	Scrape		Center
HV2-1-UmCSw	umbilicus	Moist	Swab		Center
HV3-1-BaCSc	back	Sebaceous	Scrape		Center
HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab		Right
HV3-1-UmCSw	umbilicus	Moist	Swab		Center
HV4-1-BaCSc	back	Sebaceous	Scrape		Center
HV4-1-UmCSw	umbilicus	Moist	Swab		Center
HV5-BaCSc	back	Sebaceous	Scrape		Center
HV5-UmCSw	umbilicus	Moist	Swab		Center
HV6-1-BaCSc	back	Sebaceous	Scrape		Center
HV6-1-UmCSw	umbilicus	Moist	Swab		Center

For this tutorial, we will assume that libraries beginning with HV1, HV3, HV5, HV7, and HV8 are “Female”
 Ctrl-click the cells whose **Library Name** begins with these numbers
 Click **Paste**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 2	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab		Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab		Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape		Center
17 HV5-UmCsw	umbilicus	Moist	Swab		Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab		Center
20 HV7-BaCSc	back	Sebaceous	Scrape		Center
21 HV7-BtRSc	buttock	Dry	Scrape		Right
22 HV7-PhRSc	plantar heel	Moist	Scrape		Right
23 HV7-UmCsw	umbilicus	Moist	Swab		Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape		Right
25 HV8-BaCSc	back	Sebaceous	Scrape		Center
26 HV8-EIRSc	elbow	Dry	Scrape		Right
27 HV8-TwRSc	toe web space	Moist	Scrape		Right
28 HV8-UmCsw	umbilicus	Moist	Swab	none	Center
29 HV9-BaCSc	back	Sebaceous	Scrape		Center
30 HV9-UmCsw	umbilicus	Moist	Swab		Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

"Female" now appears in each of the selected cells

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 16	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCsw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab		Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCsw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCsw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape		Center
30 HV9-UmCsw	umbilicus	Moist	Swab		Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

To fill in the remaining empty cells with "Male", click on the third cell in the column

A drop-down selector will appear

Select "Male"

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 16	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCsw	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	none	Center
4 HV10-UmCsw	umbilicus	Moist	Swab	none	Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
6 HV2-1-AcRsw	antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape		Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape		Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape		Center
10 HV2-1-UmCsw	umbilicus	Moist	Swab		Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCsw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Female	Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab		Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

Click Copy

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 17	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCsw	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	back	Sebaceous	Scrape	Male	Center
4 HV10-UmCsw	umbilicus	Moist	Swab		Center
5 HV2-1-AcRSc	antecubital fossa	Moist	Scrape		Right
6 HV2-1-AcRsw	antecubital fossa	Moist	Swab		Right
7 HV2-1-AIRSc	alar crease	Sebaceous	Scrape		Right
8 HV2-1-BaCSc	back	Sebaceous	Scrape		Center
9 HV2-1-GcCSc	gluteal crease	Moist	Scrape		Center
10 HV2-1-UmCsw	umbilicus	Moist	Swab		Center
11 HV3-1-BaCSc	back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCsw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab		Center

Copy

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

For this tutorial, we will assume that libraries beginning with HV10, HV2, HV4, HV6, and HV9 are "Male"

Ctrl-click the remaining empty cells whose **Library Name** begins with these numbers

Click **Paste**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 17	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape		Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab		Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCsw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape		Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab		Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCsw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCsw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape		Center
30 HV9-UmCsw	umbilicus	Moist	Swab	none	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

Click **Apply** to keep the new metadata

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 30	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCsw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCsw	umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCsw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCsw	umbilicus	Moist	Swab	Male	Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCsw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCsw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape	Male	Center
30 HV9-UmCsw	umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Sex

Type: String that is 8 characters or less

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Sex' has been added

Enumerated Values: Optional

Values

Female

Male

<New>

Add Value

Delete Value

Clear Values

Add

Replace

Delete

Clear

Each library in the project is now assigned as "Male" or "Female" for the "Sex" metadata category

Now we will create another new metadata category and assign a value to each library. For this example, we will create a new metadata category of “Age”, and we will assign a variety of ages to the collection of libraries.

D. Create 64 bit Integer Metadata

Because there is high variability in the ages of the patients, we will not create **Enumerated Values**. Instead, the values will be entered manually for each library. This metadata category is in the format of a **64 bit Integer** (a whole number/number with no fractional part).

Click in the white space of the **Defined Metadata** pane to clear any selections

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 30	Sex

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRSw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Male	Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCSw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCSw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape	Male	Center
30 HV9-UmCSw	umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Enumerated Values: Optional

Name: ...to clear this field

Type: String that may be more than 8 characters

Upper Bound: Optional

Lower Bound: Optional

Status:

Add Value

Add

Replace

Delete

Clear

Delete Value

Clear Values

Values

<New>

Type “Age” into **Name** field
In **Type** drop-down, choose **64 bit Integer**

Click **Add** button to the right of the **Metadata Definition** section to add “Age” to the **Defined Metadata** list

The screenshot shows the Metadata window with the Metadata Definition section. The 'Name' field is set to 'Age', and the 'Type' is set to '64 bit Integer'. The 'Add' button is highlighted with a red arrow. The 'Defined Metadata' list on the left shows the following items:

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 30	Sex

The 'Assigned Metadata' table on the right shows the following data:

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Male	Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCSw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCSw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape	Male	Center
30 HV9-UmCSw	umbilicus	Moist	Swab	Male	Center

The Metadata Definition section shows the following fields:

- Name: Age
- Type: 64 bit Integer
- Upper Bound: Optional
- Lower Bound: Optional
- Status: The Metadata 'Age' has been added

The 'Add' button is highlighted with a red arrow. The 'Enumerated Values' section is empty.

This category is now defined and can be edited so that it's associated with each library

The screenshot shows the Metadata window with the 'Age' metadata item selected in the 'Defined Metadata' list. The 'Assigned Metadata' table on the right shows the following data:

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaRsw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Male	Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCSw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCSw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape	Male	Center
30 HV9-UmCSw	umbilicus	Moist	Swab	Male	Center

The 'Defined Metadata' list shows the following items:

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 30	Sex
6 0	Age

The 'Age' item is highlighted with a red circle. The 'Metadata Definition' section shows the following fields:

- Name: Age
- Type: 64 bit Integer
- Upper Bound: Optional
- Lower Bound: Optional
- Status: The Metadata 'Age' has been added

The 'Add' button is highlighted with a red arrow. The 'Enumerated Values' section is empty.

Select “Age” in the **Defined Metadata** pane

Click **Add** button between panes

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Symmetry
5 30	Sex
6 0	Age

Add -> <- Remove

Assigned Metadata

Library Name	Anatomy	Microenvironment	SampleType	Sex	Symmetry
12 HV3-1-RaSw	retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw	umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc	back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw	umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc	back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw	umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc	back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw	umbilicus	Moist	Swab	Male	Center
20 HV7-BaCSc	back	Sebaceous	Scrape	Female	Center
21 HV7-BtRSc	buttock	Dry	Scrape	Female	Right
22 HV7-PhRSc	plantar heel	Moist	Scrape	Female	Right
23 HV7-UmCSw	umbilicus	Moist	Swab	Female	Center
24 HV8-AcRSc	antecubital fossa	Moist	Scrape	Female	Right
25 HV8-BaCSc	back	Sebaceous	Scrape	Female	Center
26 HV8-EIRSc	elbow	Dry	Scrape	Female	Right
27 HV8-TwRSc	toe web space	Moist	Scrape	Female	Right
28 HV8-UmCSw	umbilicus	Moist	Swab	Female	Center
29 HV9-BaCSc	back	Sebaceous	Scrape	Male	Center
30 HV9-UmCSw	umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

An "Age" column now appears alphabetically in the **Assigned Metadata** pane

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 0	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc		back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw		umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc		back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw		umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSc		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

For this tutorial, we will assume that libraries beginning with HV1 = 37 years old, HV10 = 36 yrs, HV2 = 48 yrs, HV3 = 63 yrs, HV4 = 74 yrs, HV5 = 34 yrs, HV6 = 52 yrs, HV7 = 54 yrs, HV8 = 41 yrs and HV9 = 75 yrs.

Because the ages are highly variable, it would probably be a waste of time to create **Enumerated Values**, so we will manually enter the ages and then use the **Copy/Paste** functions to fill the values down.

Enter “37” into the first cell in the “Age” column

Click **Copy**

The screenshot shows the Metadata application window. At the top, there are tabs for 'All Libraries', 'Selected Libraries', and '30 Total Libraries'. Below this, there are two main sections: 'Defined Metadata' and 'Assigned Metadata'.

Defined Metadata: A table with columns 'Used' and 'Name'. It lists several metadata fields: Anatomy, Microenvironment, SampleType, Sex, Symmetry, and Age. The 'Age' field is selected, and its 'Type' is set to '64 bit Integer'.

Assigned Metadata: A table with columns 'Library Name', 'Age', 'Anatomy', 'Microenvironment', 'SampleType', 'Sex', and 'Symmetry'. The 'Age' column is highlighted, and a red arrow points to the first cell containing the value '37'. Below this table, there is a 'Copy' button with a red arrow pointing to it.

Metadata Definition: A section at the bottom for defining the 'Age' metadata field. It includes fields for 'Name' (Age), 'Type' (64 bit Integer), 'Upper Bound', 'Lower Bound', and 'Enumerated Values'. There are buttons for 'Add Value', 'Delete Value', 'Clear Values', 'Add', 'Replace', 'Delete', and 'Clear'. A note at the bottom right states: 'Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.'

Click the other HV1 “Age” cell (in row 2)

Click **Paste**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 1	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw		umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc		back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw		umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

The value "37" now corresponds to all libraries whose **Library Name** begins with HV1

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 2	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironment	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	37	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc		back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw		umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

Click on the third cell in the column
Enter "36" into the third cell in the "Age" column
Click **Copy**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 2	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironmen	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	37	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	36	back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw		umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

Click the other HV10 "Age" cell (in row 4)

Click **Paste**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 3	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironmen	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	37	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	36	back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw		umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

The value "36" now corresponds to all libraries whose **Library Name** begins with HV10

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 4	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironmen	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	37	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	36	back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw	36	umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc		antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy Paste

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

Click on the fifth cell in the column
Enter "48" into the fifth cell in the "Age" column
Click **Copy**

Metadata

All Libraries Selected Libraries 30 Total Libraries

Export Apply Done

Defined Metadata

Used	Name
1 30	Anatomy
2 30	Microenvironment
3 30	SampleType
4 30	Sex
5 30	Symmetry
6 4	Age

Add -> <- Remove

Assigned Metadata

Library Name	Age	Anatomy	Microenvironmen	SampleType	Sex	Symmetry
1 HV1-1-BaCSc	37	back	Sebaceous	Scrape	Female	Center
2 HV1-1-UmCSw	37	umbilicus	Moist	Swab	Female	Center
3 HV10-BaCSc	36	back	Sebaceous	Scrape	Male	Center
4 HV10-UmCSw	36	umbilicus	Moist	Swab	Male	Center
5 HV2-1-AcRSc	48	antecubital fossa	Moist	Scrape	Male	Right
6 HV2-1-AcRSw		antecubital fossa	Moist	Swab	Male	Right
7 HV2-1-AIRSc		alar crease	Sebaceous	Scrape	Male	Right
8 HV2-1-BaCSc		back	Sebaceous	Scrape	Male	Center
9 HV2-1-GcCSc		gluteal crease	Moist	Scrape	Male	Center
10 HV2-1-UmCSw		umbilicus	Moist	Swab	Male	Center
11 HV3-1-BaCSc		back	Sebaceous	Scrape	Female	Center
12 HV3-1-RaRSw		retroauricular c...	Sebaceous	Swab	Female	Right
13 HV3-1-UmCSw		umbilicus	Moist	Swab	Female	Center
14 HV4-1-BaCSc		back	Sebaceous	Scrape	Male	Center
15 HV4-1-UmCSw		umbilicus	Moist	Swab	Male	Center
16 HV5-BaCSc		back	Sebaceous	Scrape	Female	Center
17 HV5-UmCSw		umbilicus	Moist	Swab	Female	Center
18 HV6-1-BaCSc		back	Sebaceous	Scrape	Male	Center
19 HV6-1-UmCSw		umbilicus	Moist	Swab	Male	Center

Copy

Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.

Metadata Definition

Name: Age

Type: 64 bit Integer

Upper Bound: Optional

Lower Bound: Optional

Status: The Metadata 'Age' has been added

Enumerated Values: Optional

Add Value

Values

<New>

Delete Value

Clear Values

Add

Replace

Delete

Clear

Shift-click the other HV2 "Age" cells (in rows 6-10)

Click Paste

The screenshot shows the Metadata application interface. On the left, the 'Defined Metadata' list shows 'Age' as the 6th item. The 'Assigned Metadata' table has columns: Library Name, Age, Anatomy, Microenvironment, SampleType, Sex, and Symmetry. The 'Age' column contains values 37, 37, 36, 36, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48. A red arrow points to the 'Paste' button in the bottom right corner. A note below the table states: 'Note: Number of rows/columns to paste to must match the number of rows/columns copied. One cell may be copied then pasted to multiple cells.'

The value “48” now corresponds to all libraries whose **Library Name** begins with HV2

The screenshot shows the Metadata application interface. The 'Assigned Metadata' table is the same as in the previous screenshot, but the 'Age' column is now highlighted with a red circle. The 'Age' column contains values 37, 37, 36, 36, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48, 48. The 'Paste' button is still highlighted with a red arrow. The note below the table remains the same.

Repeat the same process until the “Age” column is completely filled in...

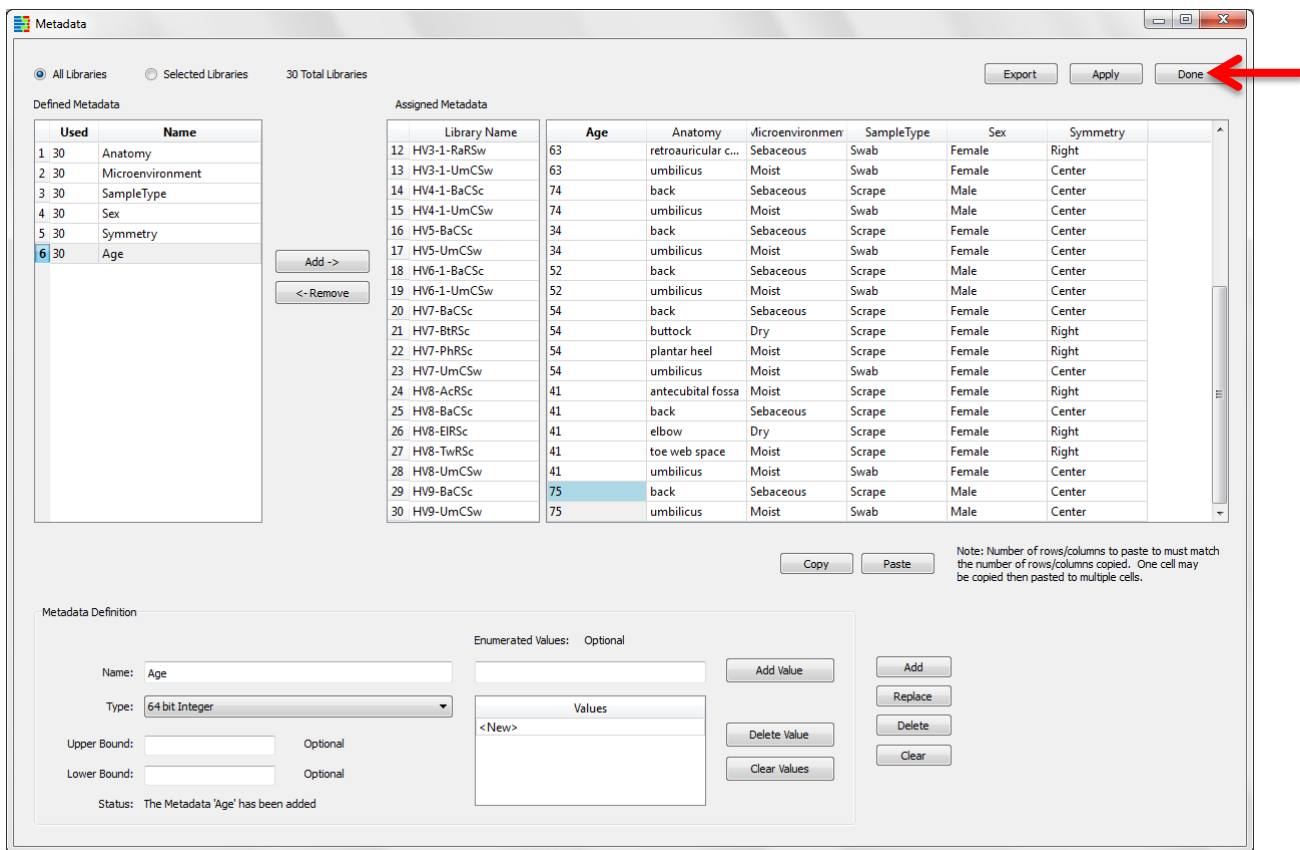
(Reminder: For this tutorial, we will assume that libraries beginning with HV1 = 37 years old, HV10 = 36 yrs, HV2 = 48 yrs, HV3 = 63 yrs, HV4 = 74 yrs, HV5 = 34 yrs, HV6 = 52 yrs, HV7 = 54 yrs, HV8 = 41 yrs and HV9 = 75 yrs.)

When finished filling in the ages for each **Library Name**, click **Apply** to keep the new metadata

The screenshot shows the 'Metadata' application window. At the top, there are tabs for 'All Libraries' and 'Selected Libraries', with a count of '30 Total Libraries'. On the right, there are 'Export' and 'Apply' buttons, with a red arrow pointing to the 'Apply' button. The main area is divided into two panels: 'Defined Metadata' on the left and 'Assigned Metadata' on the right. The 'Defined Metadata' panel shows a list of metadata categories: 'Anatomy', 'Microenvironment', 'SampleType', 'Sex', 'Symmetry', and 'Age'. The 'Assigned Metadata' panel shows a table with columns: 'Library Name', 'Age', 'Anatomy', 'Microenvironment', 'SampleType', 'Sex', and 'Symmetry'. The 'Age' column is highlighted in blue. Below the 'Assigned Metadata' table, there are 'Copy' and 'Paste' buttons. At the bottom, there is a 'Metadata Definition' panel with fields for 'Name' (set to 'Age'), 'Type' (set to '64 bit Integer'), 'Upper Bound', 'Lower Bound', and 'Status' (set to 'The Metadata 'Age' has been added'). There are also buttons for 'Add Value', 'Delete Value', 'Clear Values', 'Add', 'Replace', 'Delete', and 'Clear'.

Library Name	Age	Anatomy	Microenvironment	SampleType	Sex	Symmetry
HV3-1-RaRsw	63	retroauricular c...	Sebaceous	Swab	Female	Right
HV3-1-UmCSw	63	umbilicus	Moist	Swab	Female	Center
HV4-1-BaCSc	74	back	Sebaceous	Scrape	Male	Center
HV4-1-UmCSw	74	umbilicus	Moist	Swab	Male	Center
HV5-BaCSc	34	back	Sebaceous	Scrape	Female	Center
HV5-UmCSw	34	umbilicus	Moist	Swab	Female	Center
HV6-1-BaCSc	52	back	Sebaceous	Scrape	Male	Center
HV6-1-UmCSw	52	umbilicus	Moist	Swab	Male	Center
HV7-BaCSc	54	back	Sebaceous	Scrape	Female	Center
HV7-BtRSc	54	buttock	Dry	Scrape	Female	Right
HV7-PhRSc	54	plantar heel	Moist	Scrape	Female	Right
HV7-UmCSw	54	umbilicus	Moist	Swab	Female	Center
HV8-AcRSc	41	antecubital fossa	Moist	Scrape	Female	Right
HV8-BaCSc	41	back	Sebaceous	Scrape	Female	Center
HV8-EIRSc	41	elbow	Dry	Scrape	Female	Right
HV8-TwRSc	41	toe web space	Moist	Scrape	Female	Right
HV8-UmCSw	41	umbilicus	Moist	Swab	Female	Center
HV9-BaCSc	75	back	Sebaceous	Scrape	Male	Center
HV9-UmCSw	75	umbilicus	Moist	Swab	Male	Center

Each library in the project is now assigned a number for the “Age” metadata category
Click **Done** to return to the “Workspace 1” window



II. Create a Filter with the New Metadata Categories

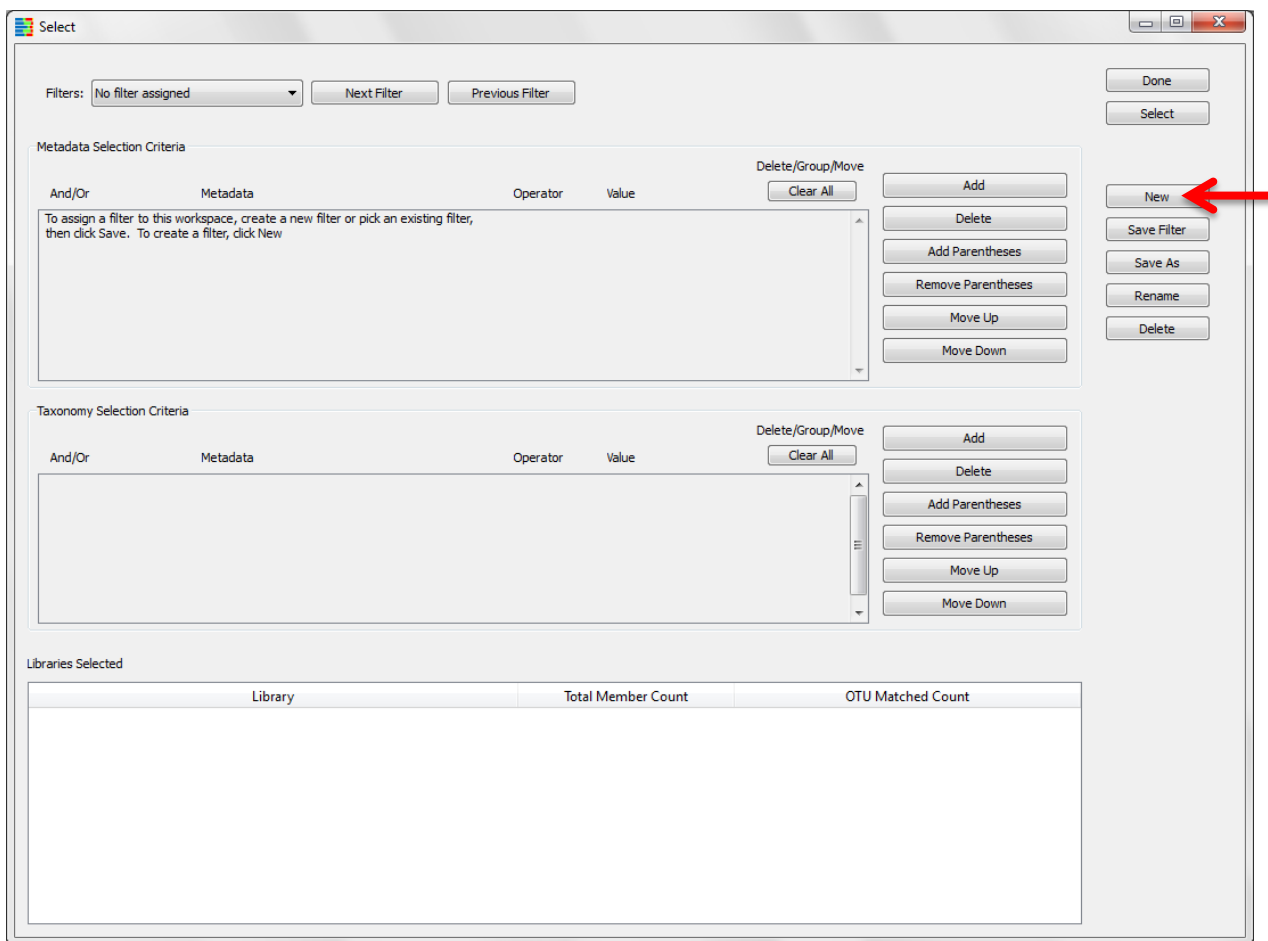
The newly created metadata categories, “Sex” and “Age”, function exactly as the previously imported (see the basic tutorial) metadata. To demonstrate this, we will create a filter to **Select Libraries**.

A. Create a Filter

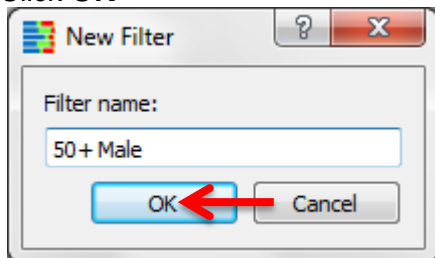
Data → **Select Libraries**

New pop-up window appears for creation of filters

Click **New** on far right side of window



Enter desired filter name in the pop-up window
Click **OK**



The filter name will appear in upper left corner of window

The screenshot shows a window titled "Select" with a toolbar at the top containing "Filters: 50+ Male", "Next Filter", and "Previous Filter". The "Filters: 50+ Male" dropdown is circled in red. On the right side of the window are buttons for "Done", "Select", "New", "Save Filter", "Save As", "Rename", and "Delete".

The main area is divided into two sections: "Metadata Selection Criteria" and "Taxonomy Selection Criteria". Each section has a table with columns "And/Or", "Metadata", "Operator", and "Value". Below each table is a text box with the instruction "To add a new criteria for Metadata, click Add" (or "Taxonomy" for the second section). To the right of each table is a "Delete/Group/Move" section with buttons: "Clear All", "Add", "Delete", "Add Parentheses", "Remove Parentheses", "Move Up", and "Move Down".

At the bottom is a "Libraries Selected" section with a table:

Library	Total Member Count	OTU Matched Count

Now that we have created a new filter, we need to set up the parameters to filter by. We will select for all libraries that were sampled from a "Male" older than "50".

B. Set Up the Filter Parameters

Click **Add** in the **Metadata Criteria** pane

The screenshot shows a window titled "Select" with a filter bar at the top displaying "50+ Male". Below this are two main sections: "Metadata Selection Criteria" and "Taxonomy Selection Criteria". Each section has a table with columns "And/Or", "Metadata", "Operator", and "Value". In the Metadata section, the "Add" button is highlighted with a red arrow. To the right of these sections are buttons for "Done", "Select", "New", "Save Filter", "Save As", "Rename", and "Delete". At the bottom is a "Libraries Selected" table with columns "Library", "Total Member Count", and "OTU Matched Count".

Filters: 50+ Male Next Filter Previous Filter Done Select

Metadata Selection Criteria

And/Or	Metadata	Operator	Value	Delete/Group/Move
To add a new criteria for Metadata, click Add				

Clear All Add Delete Add Parentheses Remove Parentheses Move Up Move Down

Taxonomy Selection Criteria

And/Or	Metadata	Operator	Value	Delete/Group/Move
To add a new selection criteria for Taxonomy, click Add				

Clear All Add Delete Add Parentheses Remove Parentheses Move Up Move Down

Libraries Selected

Library	Total Member Count	OTU Matched Count

Use the first pull-down menu to select "Sex" (**Metadata** to filter by)
 Use the second pull-down menu to select "equals" (filter **Operator**)
 Enter "Male" into **Value**

50+ Male

Next Filter

Previous Filter

Done

Select

Metadata Selection Criteria

And/Or

Metadata

Operator

Value

Delete/Group/Move

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

Library

equals

Taxonomy Selection Criteria

And/Or

Metadata

Operator

Value

Delete/Group/Move

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

To add a new selection criteria for Taxonomy, click Add

Libraries Selected

Library	Total Member Count	OTU Matched Count

New

Save Filter

Save As

Rename

Delete

Click **Add** in the **Metadata Criteria** pane

The screenshot shows a software window titled "Select". At the top, there is a "Filters:" dropdown menu showing "50+ Male", with "Next Filter" and "Previous Filter" buttons. On the right side, there are "Done" and "Select" buttons.

The "Metadata Selection Criteria" section contains a table with columns: "And/Or", "Metadata", "Operator", "Value", and "Delete/Group/Move". The first row has "Sex" in the Metadata column, "equals" in the Operator column, and "Male" in the Value column. To the right of this table is a "Clear All" button and a vertical stack of buttons: "Add", "Delete", "Add Parentheses", "Remove Parentheses", "Move Up", and "Move Down". A red arrow points to the "Add" button.

The "Taxonomy Selection Criteria" section has a similar table structure. The first row is empty, and the text "To add a new selection criteria for Taxonomy, click Add" is displayed. It also has a "Clear All" button and a stack of action buttons: "Add", "Delete", "Add Parentheses", "Remove Parentheses", "Move Up", and "Move Down".

At the bottom, the "Libraries Selected" section contains a table with three columns: "Library", "Total Member Count", and "OTU Matched Count". The table body is currently empty.

Use the first pull-down menu to select "And"
 Use the second pull-down menu to select "Age" (**Metadata** to filter by)
 Use the third pull-down menu to select "greater than" (filter **Operator**)
 Enter "50" into **Value**

Select

Filters: 50+ Male Next Filter Previous Filter

Done
Select

Metadata Selection Criteria

And/Or Metadata Operator Value Delete/Group/Move

or Sex equals Male

Library equals

Add
Delete
Add Parentheses
Remove Parentheses
Move Up
Move Down

Clear All

New
Save Filter
Save As
Rename
Delete

Taxonomy Selection Criteria

And/Or Metadata Operator Value Delete/Group/Move

To add a new selection criteria for Taxonomy, click Add

Add
Delete
Add Parentheses
Remove Parentheses
Move Up
Move Down

Clear All

Libraries Selected

Library	Total Member Count	OTU Matched Count

To apply filter, click **Select** in upper right corner of window
Click **Save Filter** on far right side of window to keep the filter

50+ Male

Next Filter

Previous Filter

Done

Select

New

Save Filter

Save As

Rename

Delete

Metadata Selection Criteria

And/Or

Metadata

Operator

Value

Delete/Group/Move

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

and

Sex

equals

Male

Age

greater than

50

Taxonomy Selection Criteria

And/Or

Metadata

Operator

Value

Delete/Group/Move

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

To add a new selection criteria for Taxonomy, click Add

Libraries Selected

Library	Total Member Count	OTU Matched Count

We now see that there are 6 libraries in our project which were sampled from males over the age of 50, and if desired, we can continue running mini-experiments on this subset of the libraries (as demonstrated in the basic tutorial).

Filters: 50+ Male

Next Filter

Previous Filter

Done

Select

Metadata Selection Criteria

And/Or	Metadata	Operator	Value	Delete/Group/Move
	Sex	equals	Male	<input type="checkbox"/>
and	Age	greater than	50	<input type="checkbox"/>

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

Taxonomy Selection Criteria

And/Or	Metadata	Operator	Value	Delete/Group/Move
To add a new selection criteria for Taxonomy, click Add				

Clear All

Add

Delete

Add Parentheses

Remove Parentheses

Move Up

Move Down

6 Libraries Selected 30 Total Libraries

Library	Total Member Count	OTU Matched Count
HV4-1-BaCSc	296	
HV4-1-UmCSw	304	
HV6-1-BaCSc	334	
HV6-1-UmCSw	322	
HV9-BaCSc	263	
HV9-UmCSw	336	
Totals	1855	0

Click **Done** to return to the “Workspace 1” window

