

Donor

The Donor content is unique to ezEML+MOTHER. Recall that all fields marked with an asterisk on the form are required.

Donor ID*

The Donor ID must be unique across ALL donors in the MOTHER database. Thus, this is NOT a simple number but an encoding of various information about the donor. The recommendation is to use the following information separated by an underscore:

- Initials for the lab or creator associated with the donor.
- The first letter of the genus and species of the donor.
- A unique identification for the donor used by the scientist. This can be the animal id for a lab animal. If the donor was collected from the field, it may be the combination of the date collected and its sequence number in the collection.

Some examples:

- A Rhesus Macaque (*macaque mulatta*) donor assigned an animal id of 12345 by the lab/creator MZ can be assigned a donor id of MZ_MM_12345.
- A whelk donor that was obtained on 14 September 2020 with a sequence number of 97 collected on that date can be assigned a donor id of JS_BC_2020-09-14_097 where JS are the lab/creator's initials, BC stands for the first letter of the genus (*busycotypus*) and species (*canaliculatus*), followed by the collection date, and sequence number.

Sex*

Currently, *female* is the only value since MOTHER is storing only ovarian histology images.

Years and Days

You can specify the age of the donor, if known, as either just years, just days, or a combination of years and days.

Life Stage*

Values for life stage include: *fetal*, *neonatal*, *prepubertal*, *pubertal*, *adult*, *aging*, and *unspecified*. If you choose *unspecified*, please contact the MOTHER team with details for the life stage values for the donor species so that this information can be incorporated in future versions.

Specimen Sequence Number*

The specimen sequence number is typically 1. However, a donor may have multiple ovaries. If you are contributing slides from two ovaries of the same donor, then the specimen sequence number differentiates between the ovaries.

Specimen Tissue*

Currently, *ovary* is the only tissue for which MOTHER is storing histology images.

Ovary Position*

Choose *Left*, *Right*, or *Unspecified* from the drop-down.

Specimen Location*

The current values for specimen location are *whole ovary*, *ovarian cortex*, *ovarian medula*, *follicle*, *corpus luteum*, *unspecified*.

If the specimen location is chosen as corpus luteum, then the **Corpus Luteum Type** drop-down will be enabled to choose one of the following values: *early*, *mid*, *late*, *albicans*

If these values do not capture the location within the ovary of your donor, please contact the MOTHER team.

Day of Cycle

If known, enter the reproductive cycle day that the specimen was collected.

Cycle Type and Stage of Cycle

MOTHER currently supports the stages of the *menstrual* cycle and the *estrous* cycle in the drop down.

- menstrual stage values: *follicular*, *pre-ovulatory*, *ovulation*, *luteal*, *unspecified*.
 - If follicular, then the **Follicular Values** drop-down is enabled with the following values: *early*, *mid*, *late*.
 - If luteal, then the **Luteal Values** drop-down is enabled with the following values: *early*, *mid*, *late*, *albicans*.
- estrous stage values: *proestrus*, *estrus*, *metestres*, *diestrus*, *anestrus*, *unspecified*

There is also an *other* cycle type if your donor does not use menstrual or estrous cycles. Choose *other* and enter the stage of cycle manually. Please contact the MOTHER team so that the cycle type and stages for the donor species can be incorporated in future versions.

Slide ID*

The slide ID must be unique within the donor and specimen sequence number. If you are contributing multiple images from the same physical slide, then the slide id value must be identified by the physical slide number and the section designation of the image. For example, if slide 1 has sections A and B and you want to contribute both images, then the slide id for the image for section A is 1A whereas the slide id for the image for section B is 1B.

Experimental Treatment*

You must choose a value from the dropdown: No Treatment, Control mock treatment, Control no treatment, Treatment. *No Treatment* may be a field collected sample or a normal animal not involved in a treatment experiment. *Control no treatment* are specimens that are part of an experiment. *Control mock treatment* are animals that are part of an experiment that have a mock treatment, e.g. vehicle control or mock surgery. *Treatment* are animals that have been treated in some way, e.g. drugs, toxicants, or surgery.

Compound, dose, route, duration

If the Experimental Treatment option selected is *Treatment* or *Control mock treatment*, you must enter a brief description for compound, dose, route, duration; e.g. 10 ug ethinylestradiol administered orally once per day for 30 days.

Other Pathology

Specify whether the donor animal had any other pathologies due to diet, infection, genetic background, etc. For example, obesity or cancer of some type. In some species these may be related to the particular animal strain (e.g, Obese mice).

Section Sequence Number

If you are submitting a collection of images that allow for a 3d reconstruction of the ovary, then please enter its section sequence number for the reconstruction.

Section Thickness*

Enter the thickness of the section on the slide.

Section Thickness Units*

Choose *Microns* or *NM* from the drop-down.

Fixation*

Choose a fixation drop-down value: *Neutral Buffered Formalin 10, Paraformaldehyde, Davidsons, Neutral Buffered Formalin5 acetic Acid, Bouins, Other*

If *Other* is selected, enter the name of the fixation used in the **Other Fixation** field.

Stain*

Choose a stain drop-down value: *Light Microscopy Stain, Fluorescent Microscopy Stain, Electron Microscopy Stain*. The appropriate drop-down will be enabled based on the type of microscopy chosen:

- **Stain Light Type** values: *Eosin only, Hematoxylin only, Hematoxylin and Eosin, Masons Trichrome, Mallorys Trichrome, Periodic Acid Schiff, Sudan, Acid Fuschin, Alcian Blue, Azan Trichrome, Casans Trichrome, Cresyl VioletNissl, Giemsa, Methylene Blue, Neutral Red, Nile Blue, Nile Red, Orcein, Reticulin, Toluidine Blue, Van Gieson, Other*
 - If *Sudan*, choose the **Sudan Stain Value**: *III, IV, Black B, Oil Red O, Osmium tetroxide*
 - If *Other*, enter the name of the **Other Light Stain**
- **Stain Fluorescent Type** values: *Acridine Orange, Calcein, DAPI, Hoechst, Propidium Iodide, Rhodamine, TUNEL, Other*
 - If *Other*, enter the name of the **Other Fluorescent Stain**
- **Stain Electron Type** values: *Colloidal Gold, Osmium tetroxide, Phosphotundstic Acid, Silver Nitrate, Other*
 - If *Other*, enter the name of the **Other Electron Stain**

Magnification*

Enter the magnification value used to digitize the image.

Microscope Maker, Microscope Model, Microscope Notes

Enter the information about the microscope, if known.

Donor ?

Donor ID *	Sex *	Years	Days	Life Stage *
<input type="text"/>	female	<input type="text"/>	<input type="text"/>	<input type="text"/>

Specimen Sequence Number *	Specimen Tissue *	Ovary Position *	Specimen Location *	Corpus Luteum Type
<input type="text"/>	ovary	<input type="text"/>	<input type="text"/>	<input type="text"/>
Day Of Cycle	Cycle Type	Stage Of Cycle		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Follicular Values	Luteal Values			
<input type="text"/>	<input type="text"/>			

Slide ID *	Experimental Treatment *	Compound, dose, route, duration		
<input type="text"/>	<input type="text"/>	<input type="text"/>		
Other Pathology	Section Sequence Number	Section Thickness *	Section Thickness Units *	
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	

Fixation *	Other Fixation	Stain *	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Stain Light Type	Sudan Stain Value	Other Light Stain	
<input type="text"/>	<input type="text"/>	<input type="text"/>	
Stain Fluorescent Type	Other Fluorescent Stain	Stain Electron Type	Other Electron Stain
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Magnification *	Microscope Maker	Microscope Model
<input type="text"/>	<input type="text"/>	<input type="text"/>

Microscope Notes