



# HELP DOCUMENT - UPLOADING METADATA AND RAW PHYSIOLOGIC DATA

Database Concept, Structure, and Ontologies:  
NESCent Working Group on Mammalian Feeding Physiology

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When using the FEED database, software, or ontologies, please cite as follows:  
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R. Z. 2011. Overview of FEED, the Feeding Experiments End-User Database.  
*Integrative and Comparative Biology* 51(2):215-223. <http://dx.doi.org/10.1093/icb/icr047>.

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### I. INTRODUCTION

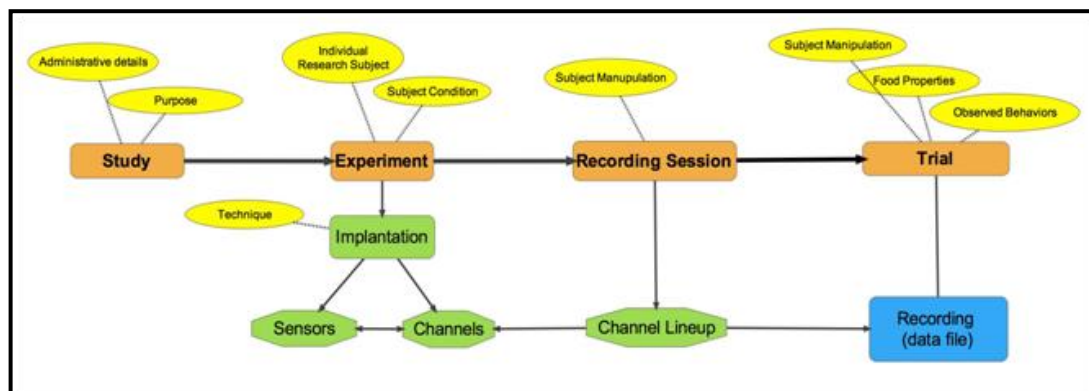
A **Study** is a top-level data container and generally corresponds to a data collection activity done by a researcher within a certain time interval, possibly using several subjects of a single species. A Study groups together one or more Experiments. Each **Experiment** is determined by a single implantation of a set of sensors in one research subject. An Experiment may employ multiple data collection techniques (e.g., EMG and strain) and may contain several Recording Sessions. Each **Recording Session** corresponds to a single hook-up of sensors to recording equipment. Finally, feeding behaviors are recorded within a **Trial**. Trials appear sequentially within a Recording Session. A raw data recording is associated with a Trial and is a set of numeric streams, each capturing a signal from one equipment channel.

Two additional data containers are **Subjects** and **Species**. **Individual Subjects** contains information for the subjects that are part of a Study. Thus, for example, the same subject will appear twice in the Individual Subjects container if it is used in two studies. **Species** provides the genus, species and common name attributions for the species for which data are available in FEED.

FEED utilizes the MFMO – Mammalian Feeding Muscle Ontology, and the OPBO – Oral/Pharyngeal Behaviors Ontology to guide Metadata entry and Search.

FEED also contains a list of **Controlled Terms** for categories of Metadata. These can be viewed by left clicking the Vocabularies tab on the Home Page.

Figure 1. FEED Data Model



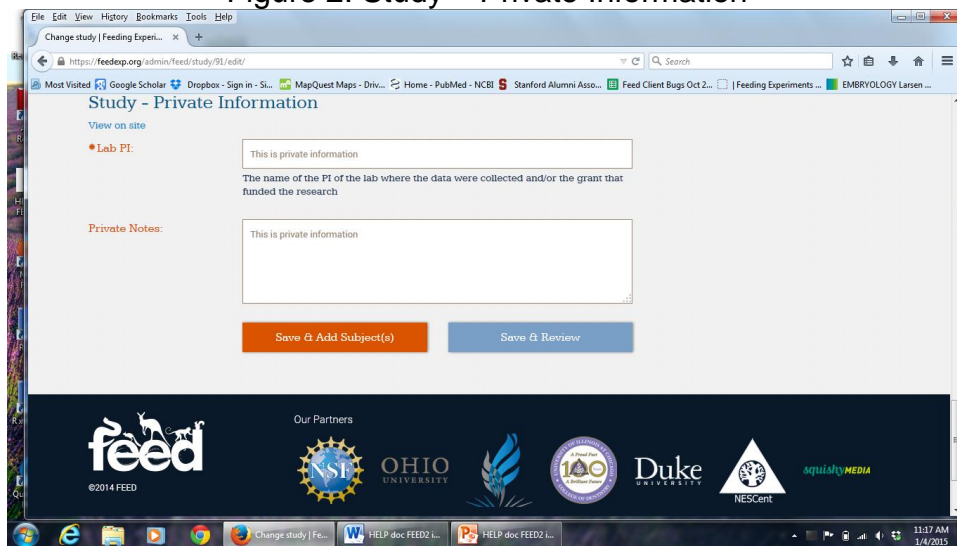
## II. The Basics: Key Upload Features

### Public and Private Information (Figure 2):

**Private** Information is not available to any User of FEED except the owner of the Study Metadata and Data. There are only 2 private types of Metadata, both contained in the Study Metadata (Figure 2). The first is the **Lab PI**. This is the name of the Principal Investigator (PI) on the grant funds or the primary data owner. The second is **Private Notes**. This is a place where the Lab PI can put any information concerning the Study that s/he wants to hold privately.

**IMPORTANT:** Do NOT put any identifying information concerning the name of the Lab PI or the location of the research in the public Metadata. FEED staff will go through all Study Metadata regularly and cull any identifying information.

Figure 2. Study – Private Information



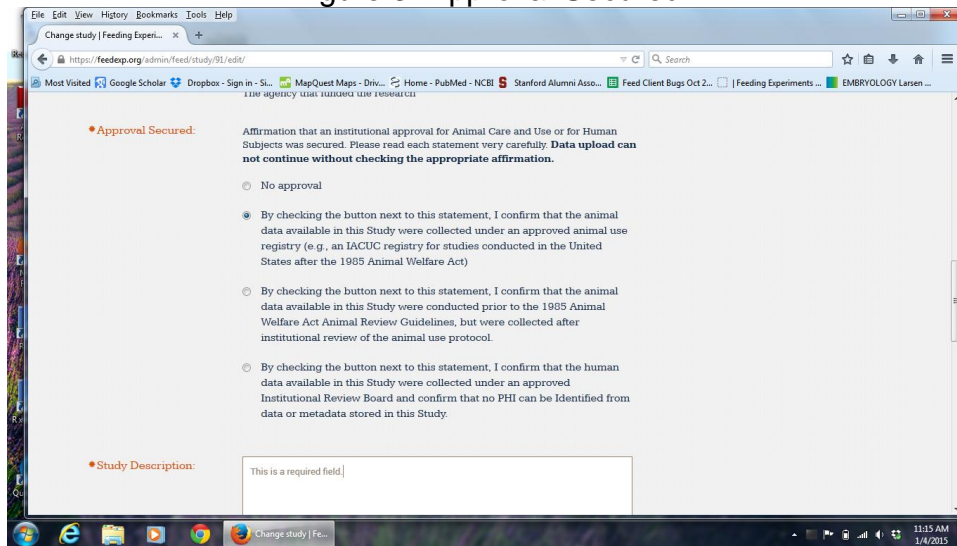
The screenshot shows a web browser window displaying the 'Study - Private Information' page. The page has a white background with a blue header bar. Below the header, there is a search bar and a navigation menu. The main content area contains two text input fields. The first field is labeled 'Lab PI' and has a placeholder text 'This is private information'. Below this field is a small text box explaining that it is for the name of the PI of the lab where the data were collected and/or the grant that funded the research. The second field is labeled 'Private Notes' and also has a placeholder text 'This is private information'. At the bottom of the form, there are two buttons: 'Save & Add Subject(s)' in orange and 'Save & Review' in blue. The footer of the page features the FEED logo and several partner logos, including NSI, Ohio University, 14C, Duke University, and NESCent. The browser's address bar shows the URL 'https://feedp.org/admin/feed/study/51/edit/'.

### Approval Secured Data Entry Field (Figure 3):

FEED only accepts Metadata and Raw Data from sources that have secured the appropriate approvals.

**IMPORTANT:** By choosing the form of approval, the Lab PI is confirming that the Metadata and Raw Data are in full compliance with all required approval agencies. If you choose “No Approval”, you will not be able to continue with Metadata and Raw Data upload.

Figure 3. Approval Secured



### Initiating Upload:

There are several ways to initiate upload of new metadata and raw data.

The large yellow Upload tab at the bottom right of the home page is the most obvious entry into Upload mode. Left click to be taken to the first Upload page.

You can also left click on the small UPLOAD tab on the tab bar of the home page.

Left click on BROWSE DATA will also allow you to click on an edit tab (pencil icon) to the right of a Study that you own.

Left click on MY DATA will also allow you to add a new study (blue tab at top left of the page).

Now you can start filling in Metadata entry fields! Some of the data entry fields are mandatory. These are identified in FEED with an orange asterisk ( \* ).

### Cloning:

After clicking on Upload, you can add a new Study or clone an existing Study. Adding a new Study will require that all Metadata be entered. Cloning an existing Study will populate the Clone with the metadata from the original Study.

Left clicking on the Clone Existing Study tab will take you to a text box where you can choose a Study to clone and decide whether to clone (1) only the Study and Subject Metadata containers from an existing Study, or (2) all Metadata in an existing Study.

The new Study will have most of the Metadata from the original Study. It does NOT include the title of the original Study. It does NOT populate the clone with the raw data or illustrations from the original Study.

## Species and Subjects:

A new species can be added to FEED when creating new Subjects in a Study.

Subjects and Studies are linked in FEED. As a result, the same Subject name can't be used in 2 or more Studies.

## Saving and Reviewing:

At the bottom of each Metadata entry page, you will have the option to SAVE & move on to the next step in Metadata entry (orange rectangular tab on the left) or SAVE & REVIEW (blue rectangular tab on the right).

## III. STUDY Metadata Entry

### Public Information:

**Title: (mandatory)** Type in the title of the study. This should be as informative as possible.

**Bookkeeping:** Type in any important identifying information that allows you to identify source data from the lab of origin.

**Start Date: (mandatory)**

Click on a date or hand enter a data following the prompts

**End Date:**

Click on a date or hand enter a data following the prompts

**Funding agency:** Text entry (whole name or acronym).

**Approval secured:** Select the appropriate radio button.

**Study Description: (mandatory)** Free text entry.

**External Sources:** Text entry. This is a place to note important external sources of data that are relevant to the Study. It can be citations or other references for data or materials that support the raw data in the Study. For example, if there is a citation on muscle fiber types, cranial measurements, or food properties relevant to the Study, the citation can be provided here.

### Private Information:

**Lab PI: (mandatory)** Text entry. The name of the lab head or principal investigator on the funding source.

**Private Notes:** Text entry.