Introduction to ARFMS

(A)Animal (R)esearch (F)acility (M)anagement (S)oftware)
1. Overview
   • Existing active protocols
   • Course Access
   • Users & Teams
   • IACUC
   • Viewing of AUPs assigned

2. Creation of New AUP
   • Filling out the AUP application
   • Attaching documents
   • Workflow
   • Protocol renewal

3. Amendments to active AUPs

4. Annual Review and Completion Forms
Access to ARFMS is dependent on permission roles given, e.g. IACUC investigators granted read and write permission to AUPs, teams assigned as Breeder teams given permission for breeding, research staff classified as in-life staff and given permission to handle animal management module.

If your team is involved in breeding, please let the IACUC office know.
• All active AUPs have been ported over
• Refer to approved protocol attached to General Information tab.
• All approved amendments are reflected under relevant tabs.
• Animal numbers approved for use with the protocol from project start date are reflected. ALL used animal numbers are to be “deducted” via ARFMS by 30 Sep 2018.
Overview - Course Access

• Google Chrome
  1. Select the Chrome menu located at the top right hand corner
  2. Select Settings > Expand Advanced located at the bottom of the page
  3. Click on Content Settings
  4. Turn Off the Block Pop-ups option

• Internet Explorer
  1. Select the Tools menu located at the top right hand corner
  2. Click on Internet Options
  3. Under Privacy tab, uncheck the box under Pop up blocker to turn it off

• Firefox
  1. On the Tools menu, click on Options
  2. From the Content tab, uncheck Block Popup Windows and click "OK"
Users & Teams

• Personnel are grouped by Teams under a PI. If an individual is no longer part of PI’s team, inform iacuc@ntu.edu.sg.

• Click on User record to view profile. Editable fields are First name, Last name and Email.
• Processes associated with Animal Use Protocols
  o Creation of new AUPs
  o Amendments to active AUPs
  o Annual Reviews
  o Completion Reports

• Click to commence submission process.
Overview - View AUPs Created

“In Progress”: To view Draft AUPs under the PI
“In Use”: To view Approved AUPs under the PI

Click on file to view documents
Creation of New AUPs

1. Click "New"
2. On pop-up, select “Animal Use Protocol (AUP)"
3. Click "Next"
Creation of New AUPs

Add protocol title and click “Save and open document”

Protocol Number automatically assigned
IMPORTANT
- Save the document after completing each tab. Software does not auto-save content entered.
- ALL questions in the AUP template are compulsory.
Save & Check-In – Saves and checks in the protocol for editing by co-I/PI.
Save - Saves the protocol. ARFMS does not auto-save so it is a best practice to save often.
Save New Version – Saves as a sub version (ex. 1.1). Can be used to keep track of different versions within a workflow step.
Compare Version – Used by reviewers to compare the current version to a previous submission.
Validate & Save – Used to check for any uncompleted mandatory questions. Validation is automatically done before protocol is submitted to IACUC office.

If document is non-editable when opened, click on Action > Check-out to commence editing.
## AUP Application – Section 1

### 1a. Project Title
Document title: Training on ARFMS

### 1b. AUP Application Type
Select the AUP application type
- New Submission
- Renewal

### 1c. Project Category
Select all that apply
- Research
- Pilot Study
- Breeding Protocol
- Teaching
- Others

### 1d. Proposed Project Duration
Project is valid for a maximum of 3 years.

Start Date (DD-MM-YYYY): 
End Date (DD-MM-YYYY): 

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Title copied from File Title upon creation. Later updates to files are not synchronized so document will need to be updated separately.
AUP Application – Section 2

Personnel assignment group

Table of assigned user(s)

Click on "Edit Selection: to assign users"
2a. Click on “+” beside Teams to view all teams

2b. Click applicable teams to select users

1. Filter for a user by entering their name in the field below and click “Apply Filter”
Example: Adding users to “Research personnel”

1. Click on a user name to add them to the list
2. Verify list
3. Click to apply selection to protocol

Note: Users can be deleted if needed
School Research Integrity Committee (RIC) representatives are to be added to a study protocol so they can be kept informed of ongoing research work in the corresponding School. To add a RIC member, select from the team, “RIC members”. If the PI for the study is a School Chair, the College representative is to be selected.
1. Click on species name(s) to select. DO NOT expand the list to select strain.

2. Confirm Selection

3. Apply selection to protocol

Species selected can be deleted from list.
A separate tab for each selected species reflecting the same questions will be shown. Select and answer the questions shown on BOTH tabs.

Check box is auto checked when content is entered. Unchecking this box will clear all answers entered.
Questionnaire on Search Data is to ensure literature search done reflects most updated information.

Table Controls: Click “Add new row” to provide answers

Right click on row to select from available options
1. Name of study segment is the AUP title

2. Click “+” to view assigned species and click Select all > Apply

3. Click “Add”

Study segment assigned
1. Select each species and assign >> to the next column

2. Click on the first “New row” to add row

3. Enter total required numbers for selected species

4. Apply calculation to protocol

To add next species, click on “Add/Edit calculation and repeat steps 1-4.
All calculations entered are reflected in the table.

<table>
<thead>
<tr>
<th>Animal Numbers</th>
<th>Max</th>
<th>Factor</th>
<th>Add/Edit Calculation</th>
<th>Delete calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mouse</td>
<td>200</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rat</td>
<td>20</td>
<td>Animals per Part</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>20</td>
<td>Animals per Part</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>300</td>
<td>Mouse</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Click on Add/Edit Calculation to add in the maximum number of animals which will be used per Species/Strain. Ensure that the number reflected under the "Total" Tab tallies with that stated under section 7a.
1) Edit the number of animals to be added under column “Max”

2) Click on Apply calculation

Click on Edit Calculation to amend entered animal numbers
Procedures can be added in two ways:

1. Catalog based procedure (pre-defined in master data)
2. Manually defined procedure (by user)
1. Click to select catalog based procedures

2. Click to add catalog based procedures to list

3. For PI defined procedures, complete this section and click “Add”

4. Assign species for each procedure in the “Assign Species” tab

5. Selected procedures are added
1. Species selection per procedure is editable.

2. Click “Accept Selection” to add procedures to protocol.
List of procedures assigned

Procedures selected from catalogue contain pre-defined text that contain guidelines on information to be provided by user.
1. Select RCULA Practical and Theory Certification for all users. DO NOT select box “AUP Training”

2. Click Refresh

Green “YES” = RCULA certification available

Red “NO” = no RCULA certification available
To attach a document to a tab, click the attachments button.
1. By default, the tab the user was on when "Attachment" was click, is selected. Change by clicking the required tab.

2. Browse and locate document.

3. Provide a description.

4. Click Add.

5. File added to list of attachments.

Note: Attachments can be opened from here at anytime.
Attachments can be viewed/edited

Attachments on tab indicated by paper clip icon
1. Ensure all questions are completed content saved via Action > Save.
2. Under Workflow tab, select ICCO Administrative Review to submit protocol for review. If mandatory question is not filled, “Questionnaire validation error” is shown. Proceed to fill out question, save and submit for ICCO Administrative Review.
AUP Application – Workflow

1. Draft
   - PI completes questions and submits for administrative review.
   - PI receives email upon submission.

2. ICCO Admin Review
   - IACUC Coordinator and pre-reviewer review application

3. For Revision (ICCO)
   - Application submitted to PI for revision. PI notified via email to access ARFMS.
   - PI reviews comments made under “Review” feature and amends application

4. ICCO Admin Review
   - IACUC Coordinator reviews changes made.
   - If changes made are acceptable, AUP submitted for full committee review

PI receives approval letter via email following IACUC review of application at monthly meeting if no further changes need to be made. If changes are required, repeat steps 2-4 outlined above.
The document to be edited can be accessed either via the link provided in the email or via the “In Progress” filter in the IACUC module.

PI can edit the document following submission when it is at “For Revision (ICCO)” stage. Click “Review” to view comments on changes to be made to application.
AUP Application – Workflow: Revision

List of all comments made by reviewer loads. Click on each topic to view comment made.

<table>
<thead>
<tr>
<th>Tab</th>
<th>Subject</th>
<th>Author</th>
<th>Responses Started on</th>
<th>Delete</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Surgical Procedures</td>
<td>Non-Surgical Procedures</td>
<td>---</td>
<td>1</td>
<td>07-Aug-2018 7:06:...</td>
</tr>
<tr>
<td>Lay Description</td>
<td>Lay Description</td>
<td>---</td>
<td>1</td>
<td>07-Aug-2018 7:05:...</td>
</tr>
<tr>
<td>Animal Requirements</td>
<td>Animal Requirements</td>
<td>---</td>
<td>1</td>
<td>07-Aug-2018 7:05:...</td>
</tr>
</tbody>
</table>

1. Click “All”
1. Enter response to comment made. NOTE: Actual change is to be made to relevant section of AUP.

2. Click Respond & Back to view remaining comments and proceed to make relevant changes to AUP.

After all requested changes are made to AUP, select Action > Save located on application page and submit document for ICCO administrative Review.
Click on “Back to main menu” to return to ARFMS home page.

Click on “Refresh” to reload the page if required. DO NOT refresh browser.

Click on “Back” to return to the IACUC module. “Back” exits the protocol without saving. It is recommended that the document be saved at every section.
1. Right click approved protocol to be renewed to show menu options

2. Select “Duplicate File”
Select “In Progress” filter to view duplicate created.

New Draft protocol initiated; new AUP number assigned.