Manual for CLAMS

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2023

We recommend our users to do CLAMS for at least 3 days, ideally 4 days.

Starting a new experiment----Animal Preperation

1. We can do maximum 8 mice a time;
2. We have a form for the users to fill up. Users need to provide the ID, body weight and tail mark of each mouse.
3. Choose the right spacer for the mice. We use the shortest spacer for mice body weight less than 35 gram. The middle one for body weight from 35 to 45 gram. Animal bigger than 45 or older than 18 month, we can use the biggest spacer.
4. Prepare the feeder;
5. Put the feeder and the cages to the right place;
6. Take each mouse and put them into the metabolic cages;
7. Close the lid properly;
8. Check each sipper to make sure that it is not blocked.

Starting Oxymax for Windows

1. Launch software: Oxymax for windows, the Startup window appears;

2. Use Default Hardware Configuration;

3. All of the hardware will be detected and initiated. If there is any error, a red Fail will show up in the "Status" column.

4. If nothing wrong with the hardware, you are ready for a new experiment. The last device, Mini-Mitter Interface is not used. So, it will always be "Fail".
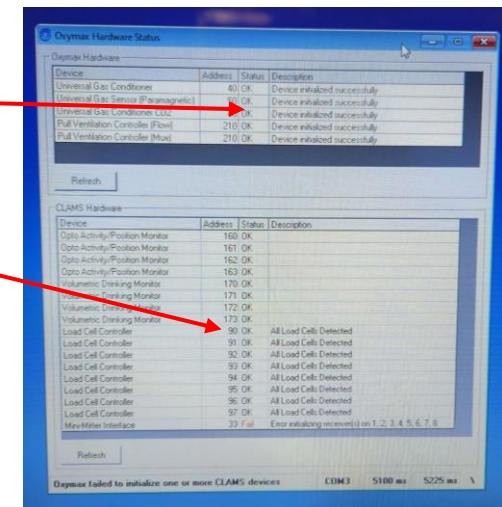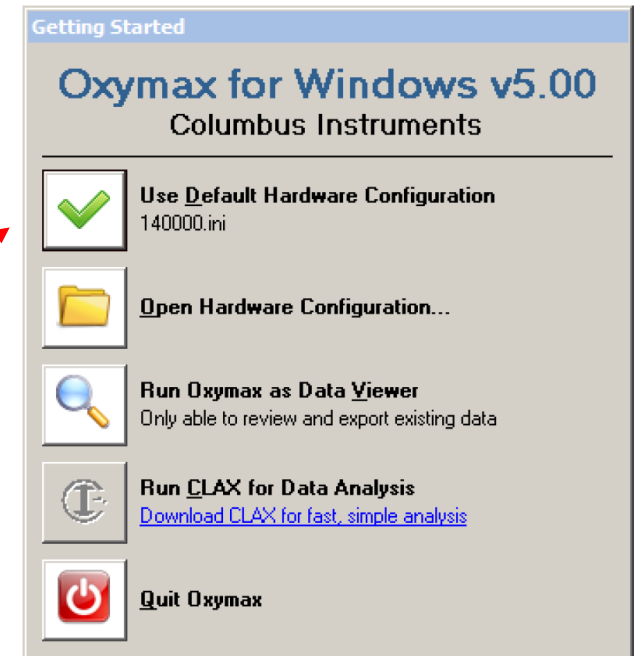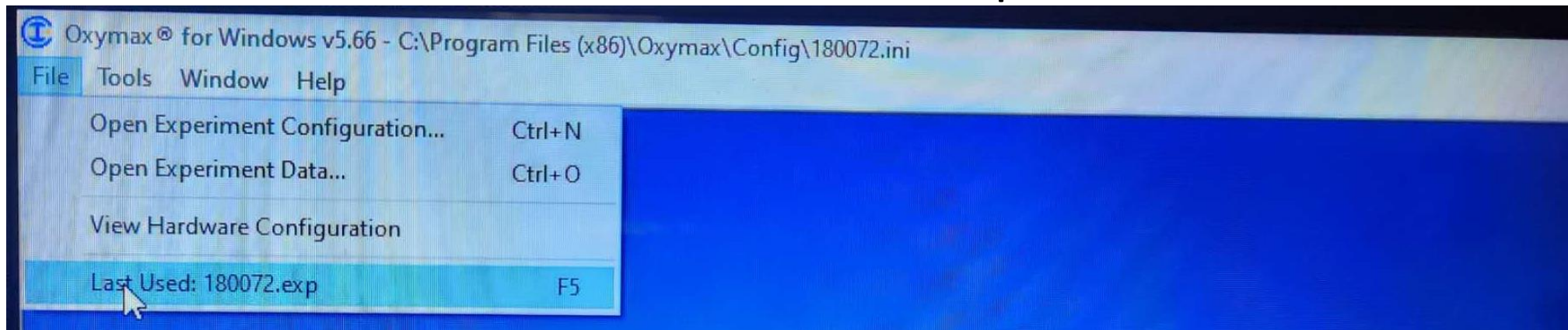
Starting a new experiment
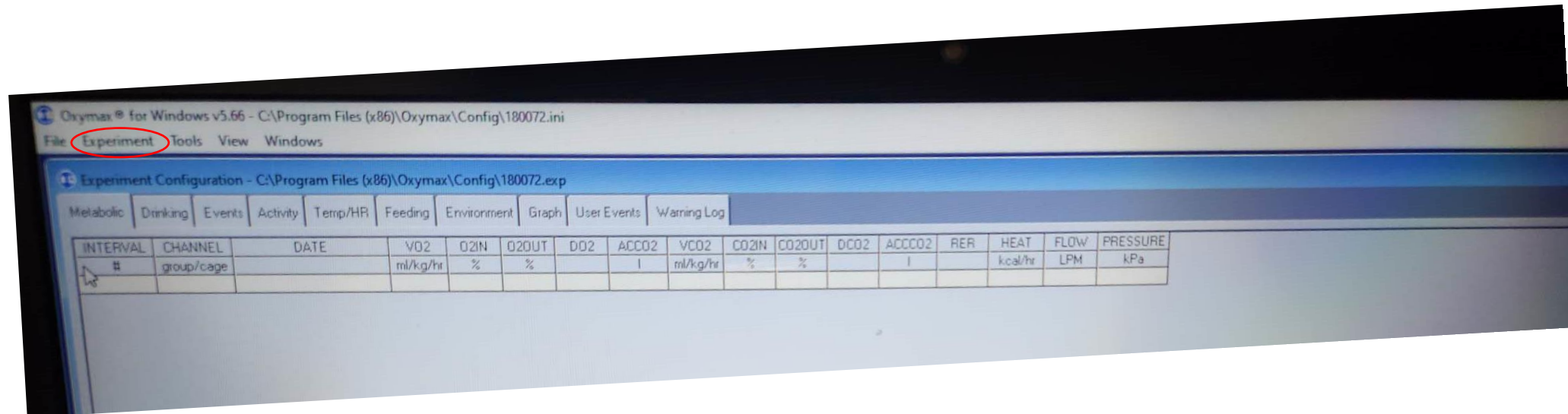
1. Minimize the "Oxymax Hardware Status" window;
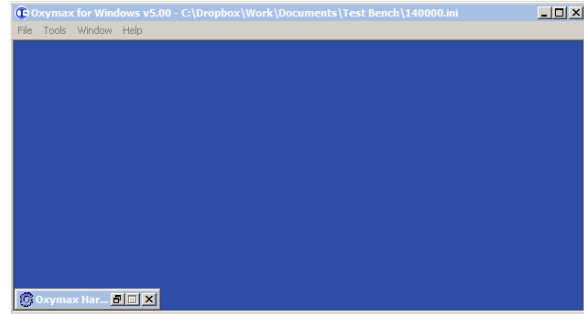
2. Click "File", choose "Last Used: 180072.exp";
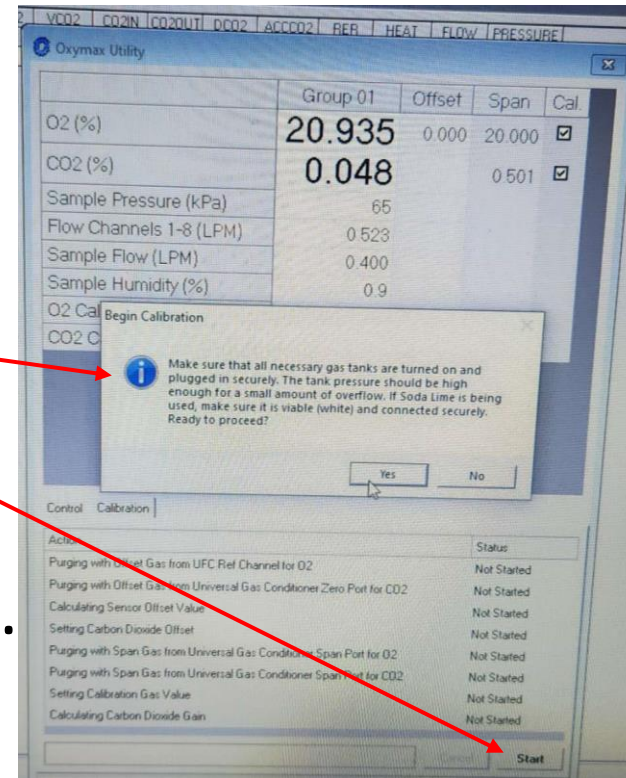
Starting a new experiment

3. Click on "Experiment" and then click on "Calibration";
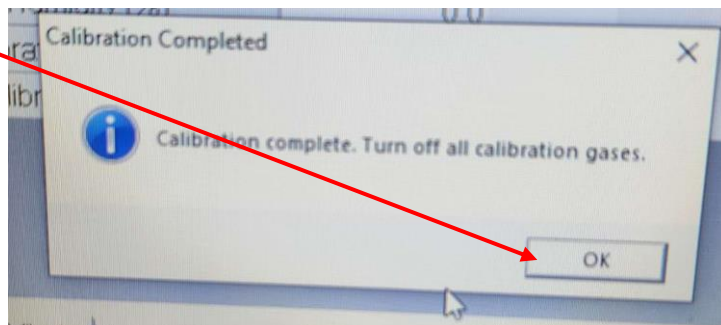
Starting a new experiment----Calibration

4. Oxymax Utility will show up;
5. Click "Start";
6. You will see this, and turn on the Oxygen tank and Nitrogen tank and click "yes";
7. If the calibration is not fine, you will see something changed into red.
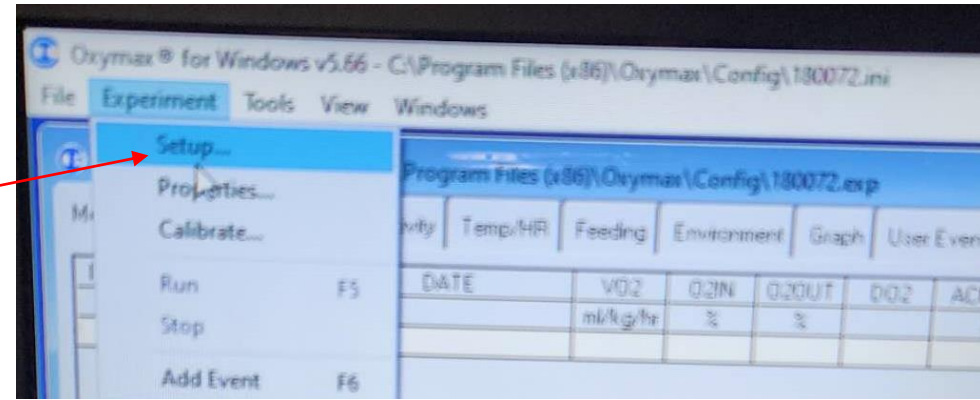8. If everything are fine, you will see this, and click "Ok".
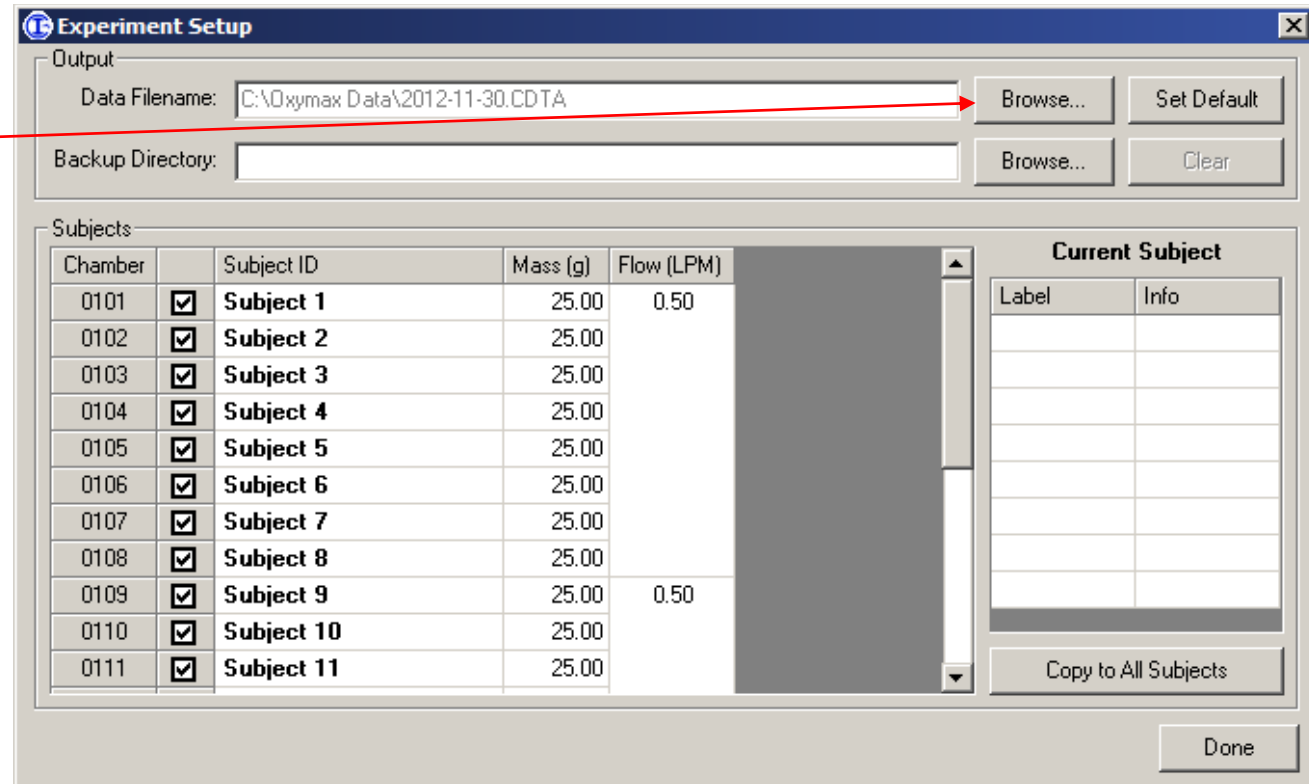

Oxygen tank

Nitrogen tank

Remember to switch off the two gas tank after calibration!!!

Starting a new experiment

9. Click on "Experiment" and then "Set up";

10. Click on "Browse" and then save the data to a proper file;
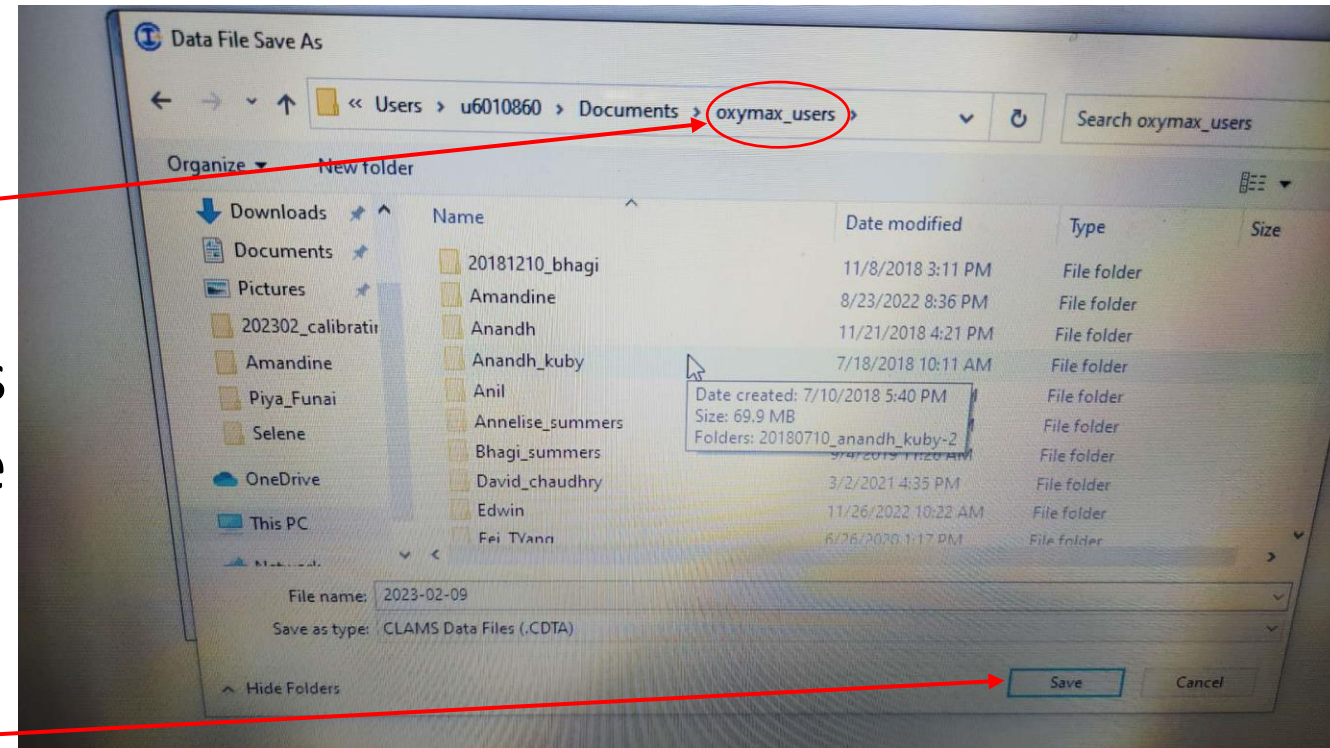
Starting a new experiment

10. Click on "Browse" and then save the data to a proper file;

    This is the folder you want to save the data. If he/she is new user, we will make a new folder. Under this folder we make a new folder with the name of the date, for example: 20230210. And then we open this folder and click on "Save". A CDTA file will be saved including all the information that will be collected.

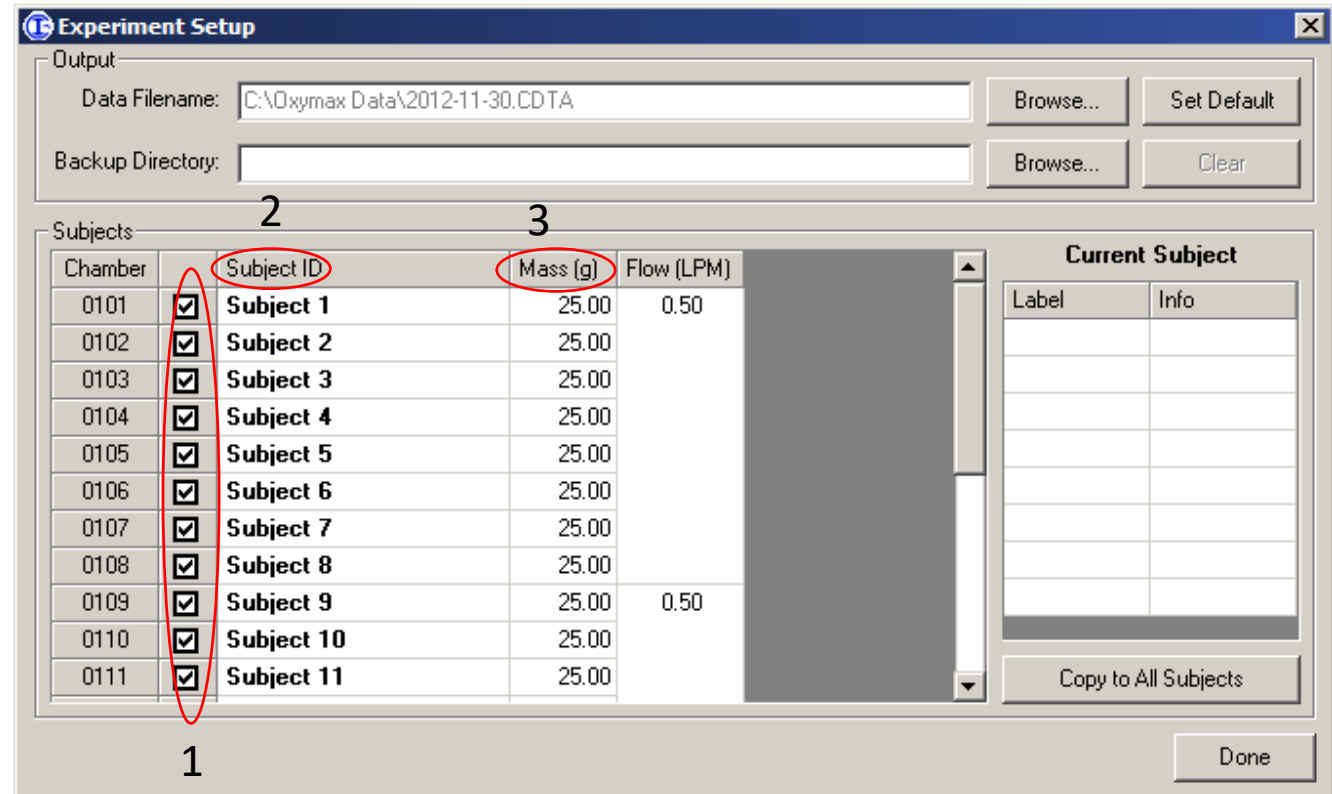   The file will be automatically named as year-month-day.

Starting a new experiment

11. You need to do three things after directing where to save the data:
- Check the cages you wanted to use;
- Fill up the Subject ID (this is given by the users);
- Fill up the body weight (this is also provided by the users).

Click Done after this.

Starting a new experiment

12. Change the number according to how many mice you want to test. Then click on "OK".

Starting a new experiment

13. Click on "Experiment" again and you will be able to choose "run";
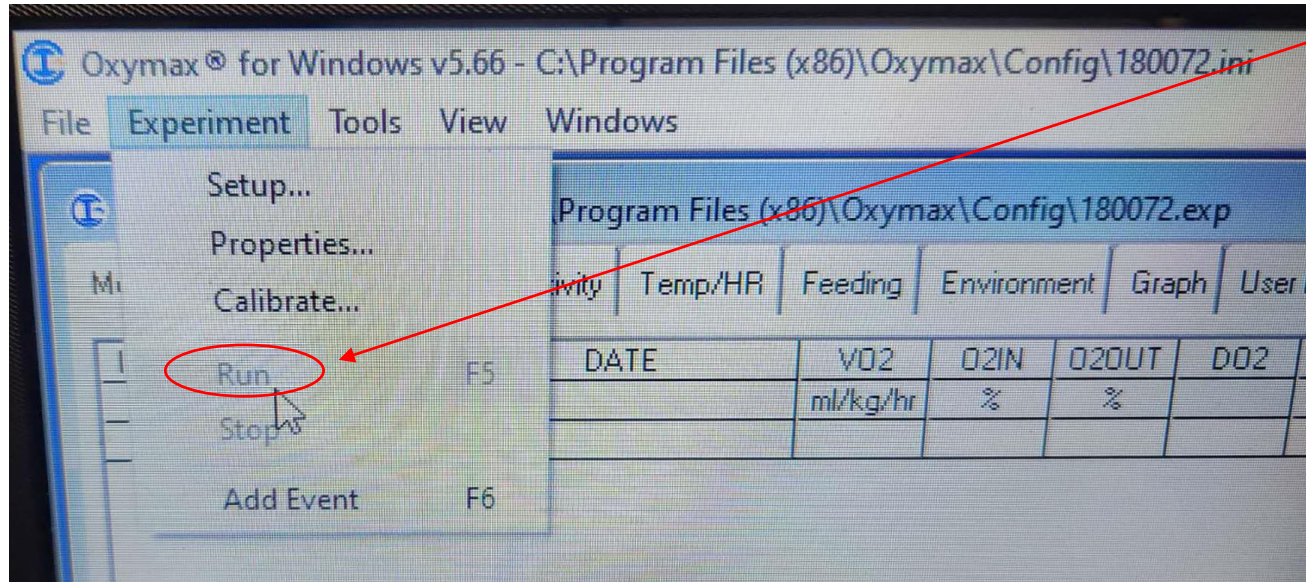
Starting a new experiment

14. During the experiment, do daily check every morning and afternoon.
- Check the "Warning log" to see if there is anything wrong;
- Check "Drinking" and "Feeding" to see if the mice acclimated properly to the cages.
- Check the sippers to confirm they are not blocked.

Starting a new experiment

14. After 3 or 4 days, click on "Experiment" again and you will be able to choose "Stop";
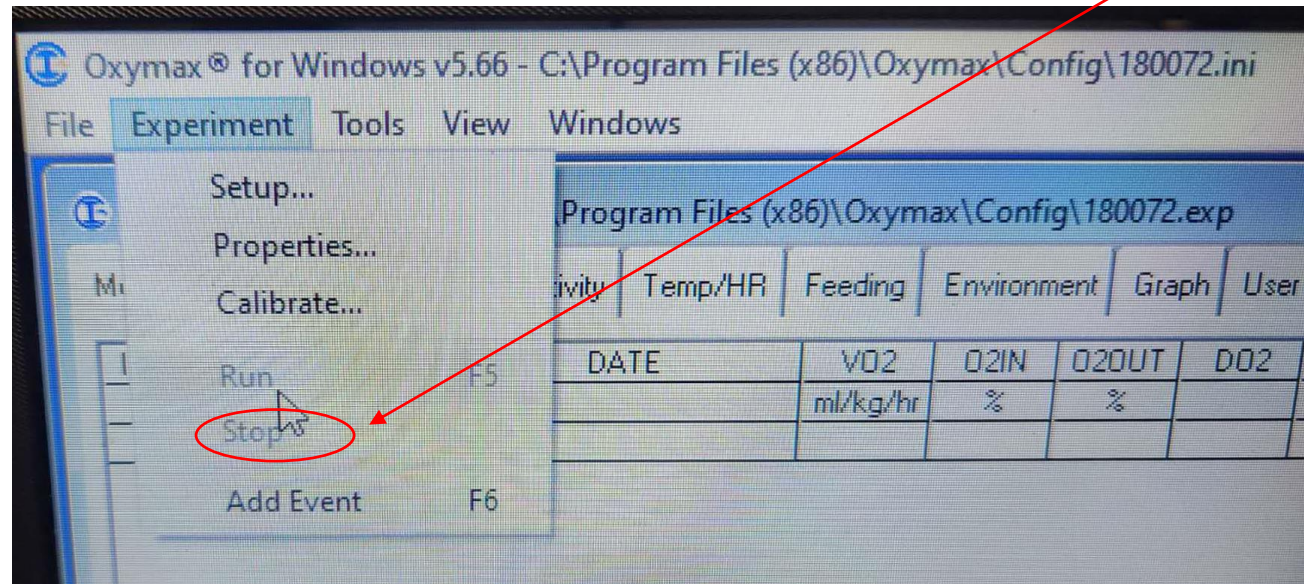
14. Then click on "File" and then "Export all subject CSVs".
15. Get back to the folder that saved this experiment and copy the whole data folder to the user's thumb drive.