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GWAS Self-Administration

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1 Works for me This protocol is published without a DOI.

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PROTOCOL CITATION

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CREATED

Jul 09, 2020

LAST MODIFIED

Jul 24, 2020

OWNERSHIP HISTORY

Jul 09, 2020 Molly Brennan
Jul 24, 2020 Sharona Sedighim

PROTOCOL INTEGER ID

39097

Animal Arrival & Grouping

- 1 When animals arrive at the lab, they will be left in a 2-week quarantine. During the end of this we will scan and mark the animals (prior to any testing or surgery).
- 2 Animals separated into four groups, predetermined on the shipping sheet provided
- 3 Groups:
 - Oxy GWAS - 60 rats (30 female, 30 male)
 - Cocaine GWAS - 60 rats (30 females, 30 males)
 - Oxy Naives - About 16 rats (8 females, 8 males)
 - Cocaine Naives - About 16 rats (8 females, 8 males)

If one of the GWAS rats dies, replace it with a naive.
- 4 Grab a rat from the cage, scan it, retrieving its RFID. Read RFID to the person with the shipping sheet, and determine which group the rat is in.

- 5 Confirm ear tag and coat color of rat.
- 6 Assign number to rat, preferably by coat color.
 1. Albino
 2. Brown Hood
 3. Black Hood
 4. Brown
 5. Black
 - If both rats in the cage have the same coat color, then no order is needed.
 - This method lets us remember the order of the rat in case the number fades out and makes it easier for individuals testing the rats.
- 7 Write animal number, coat color, and ear punch on the ACP cage card.

Putting Animals in Chambers

- 8 Pick up rat from cage and place rat in chamber box.
- 9 Scan the rat, then chamber box to make sure the rat will run in the correct box. Look for a green check mark next to the rat ID on scanning sheet on the computer. If you see a red 'X' then the rat is in the wrong box or room.
- 10 Take the metal cap and hoodie off of the rat's catheter, then flush it with 0.1 ml heparinized saline-cefazolin.
- 11 Connect the line to the catheter port and screw the metal cap on tight to prevent disconnections during the session.
- 12 View next section on how to set up MedAssociates program for starting the session.

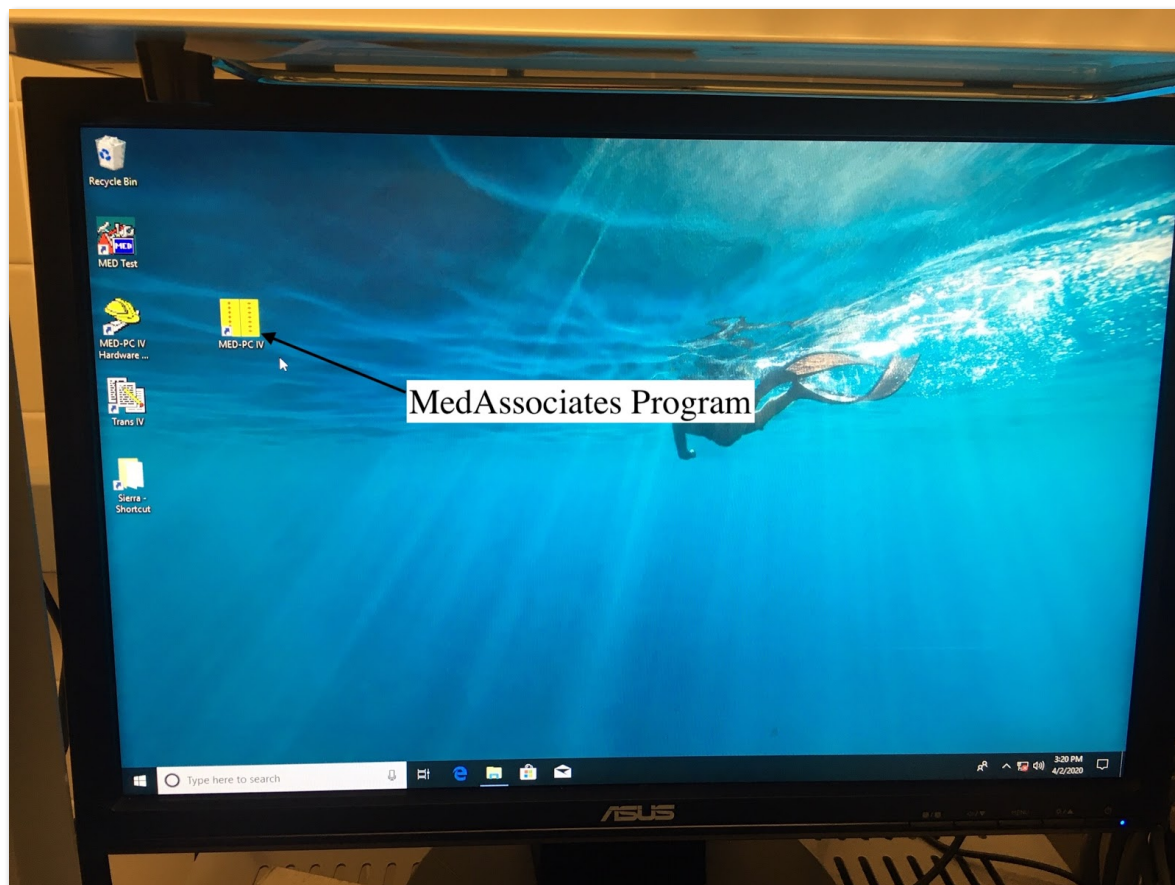
Computer Program: MedAssociates

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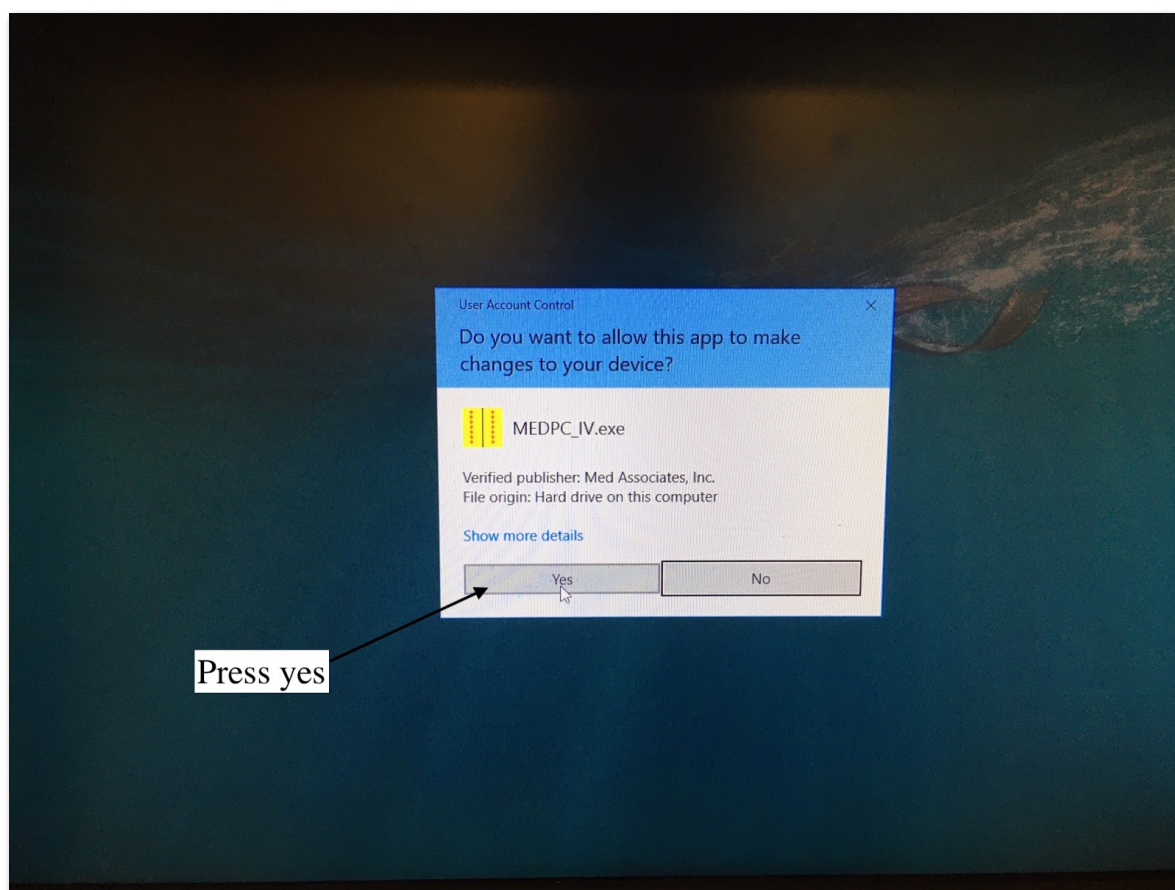
Session	Cocaine GWAS Program	Oxycodone GWAS Program
Short Access	GWAS 2HNEW	GWAS 2HNEW
Long Access	GWAS 6H	OXYGWAS 12H
Progressive Ratio	GWAS PR	GWAS PR OPIATES
Preshock and Shock	SHOCK GWAS	n/a

Programs to use for each type of session depending on whether cocaine GWAS or oxycodone GWAS animals will run.

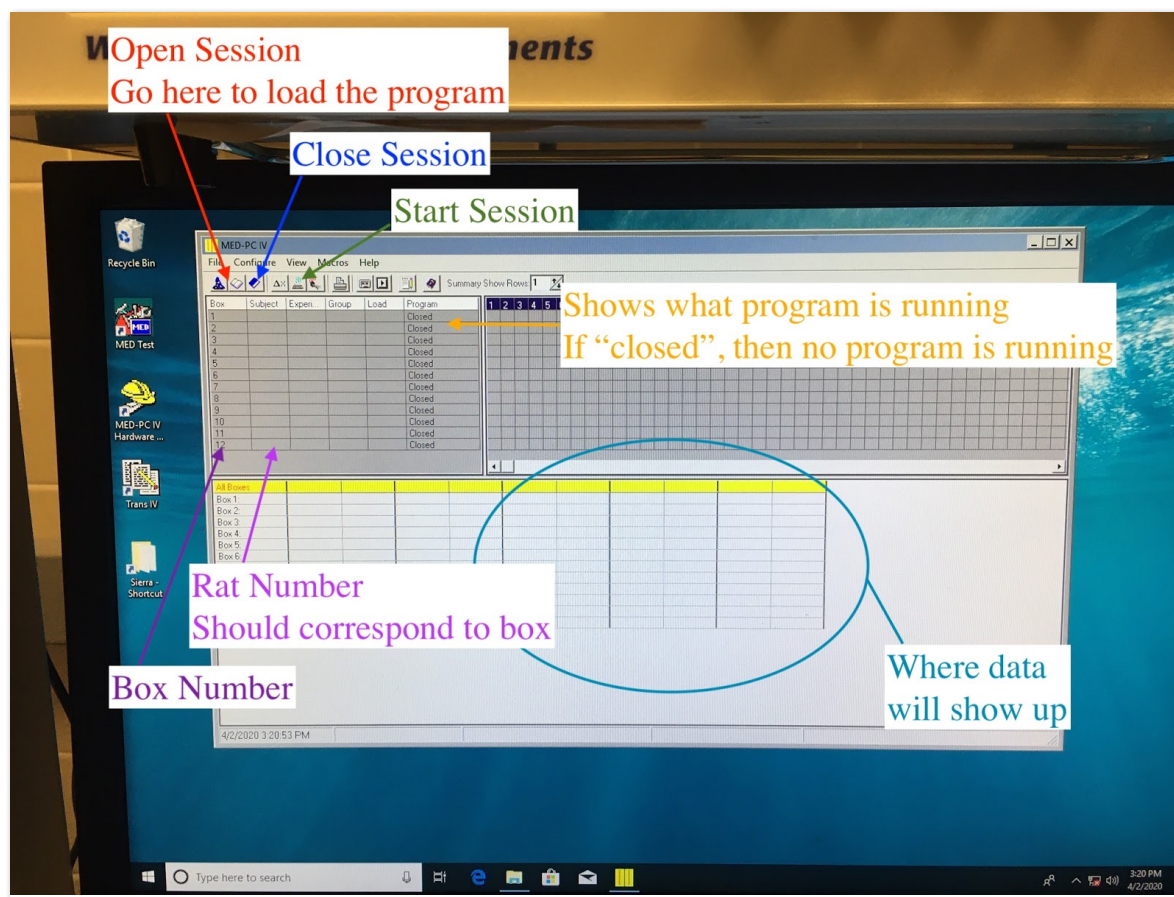
14



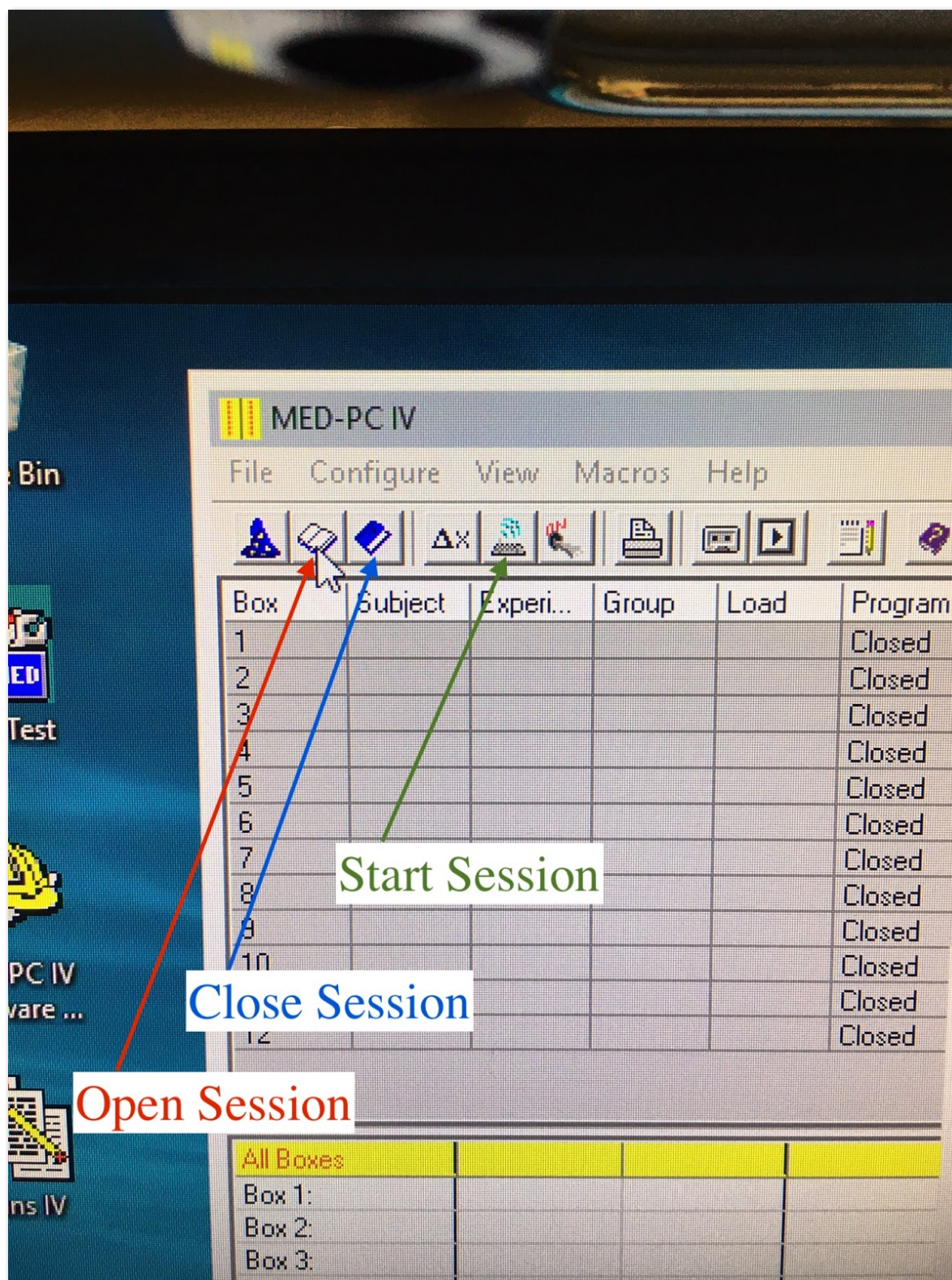
15



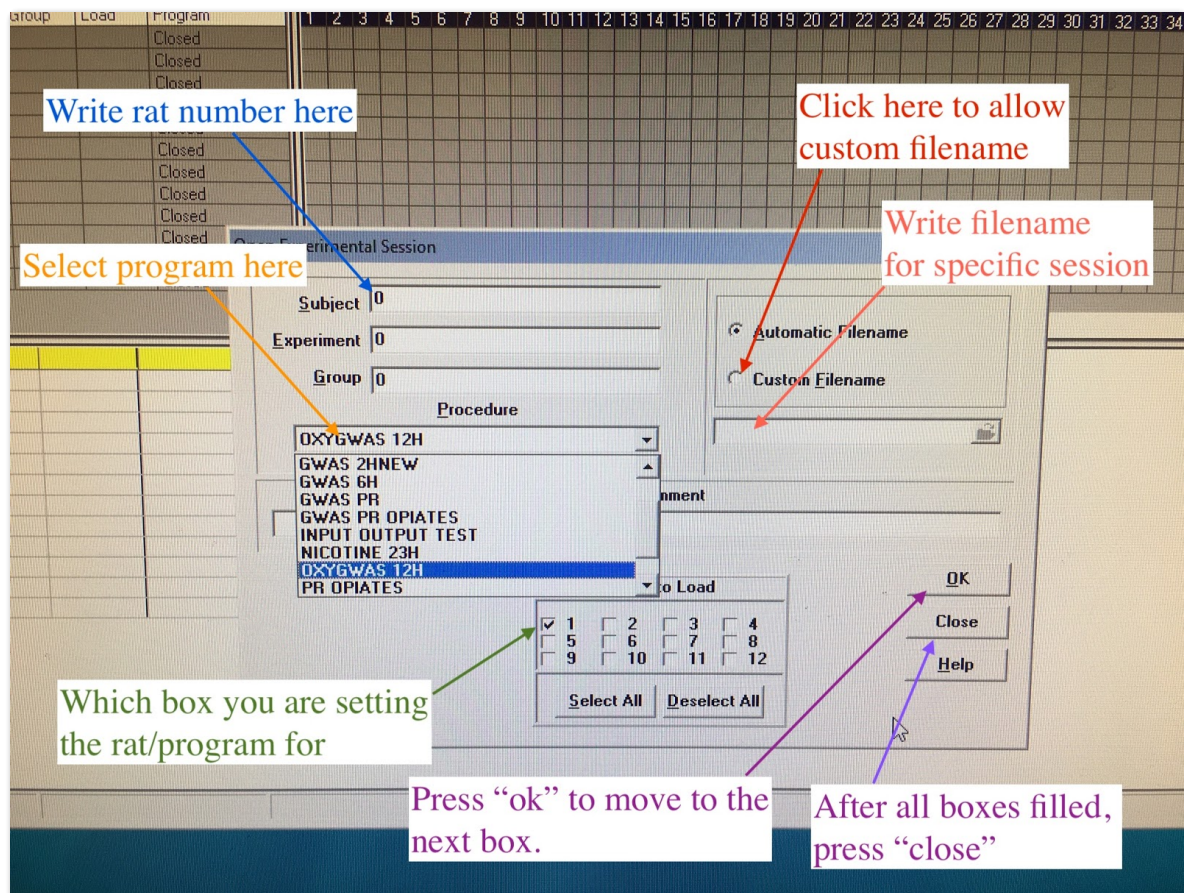
16



- 17 This page will then show up. Here, you can open, close, and start sessions. When running a self-administration session, it'll show the session you are running, the data (reward, active, inactive, and PR), etc.



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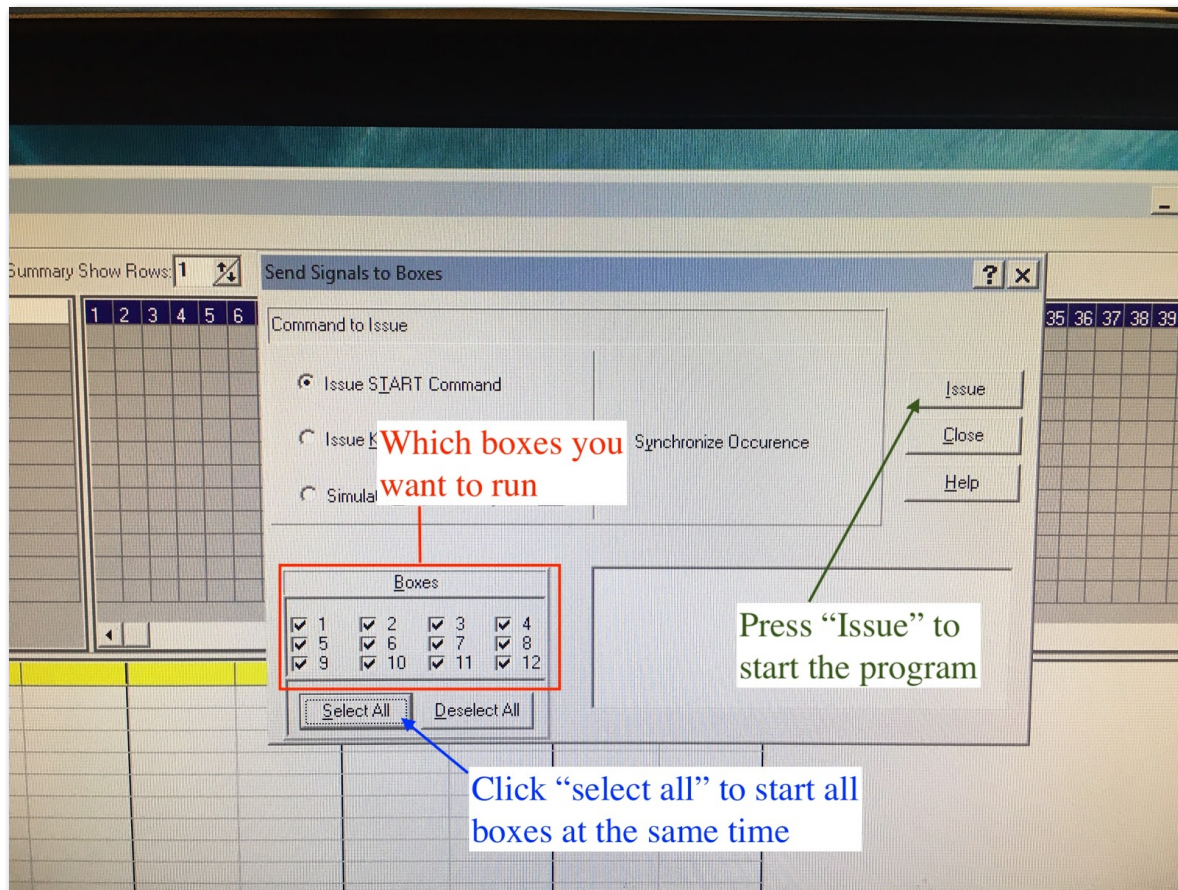


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"Open Experimental Session" window:

1. Choose which program you want to run (orange)
2. Click on "Custom filename" (red)
3. In the text box under that (pink), write the name of the session you are running (ie: C08HSOXYLGA01)
4. Go to the subject line (blue), write the rat that belongs in the box that is clicked (green) (ie: F801)
5. Press "ok" (dark purple) to move on to the next box. Then go back to the subject line and write the next rat number (ie: F802)
6. Once you are done loading all the boxes, press "close" (light purple)

21



- 22 Open "Send Signals to Boxes" window under "Configure" tab
1. If you want to start all boxes, click on the "select all" (blue) button. All boxes should be checked (red). Click on "Issue" (green) to start all boxes.
 2. If you want to start only a select few boxes, select only the boxes you want to start (red), then press "issue" (green) to start them. You can go back and click on the boxes you want to start at another time point later.

Taking Animals Out After Session

- 23 After session is complete disconnect the animal from the line. Note any issues (disconnections, tangles, etc.)
- 24 Place the hoodsie and metal cap back on, then return animal to home cage.
- 25 Collect session data.
- 26 Clean chambers with quatricide and replace bedding in trays.