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**Scanning Imaging Guide**

### **Rating: Green** (Little to no danger present. Read the protocol completely before starting)

Involve a bit of computer skills and knowing how to deal with masking tape. Nothing too complex here.

### **Introduction:**

The scanner imaging system utilizes a scanner and some software to take images at repeated intervals. It is deceptively simple concept wise that but is a very useful tool to have, especially when imaging slime molds in mazes.

Estimated time to set up: ~10 min

### **Safety information:**

Keep within the confines of common sense and you should be fine.

### **Materials:**

* Timelapse Scanning System
* Masking Tape
* Plates to be imaged (x4/scanner max)

### **Procedure:**

1. The monitor next to the scanners controls the imaging system. The system should be logged in already but if not, the password is ‘crap1’.
2. The scanning systems should already be set up with the windows corresponding to each scanner (top left, top right, bottom left, bottom right). If not, open up the application titled: [I don’t have enough information to write this section yet. I’ll find it out when I have time]
3. Discover which scanner needs to be set up. This can be done simply by hitting *preview* button on the app. **If there is no preview button, do not hit cancel**. That means that the scanner is in use. A shiny light should show up on the scanner that the window corresponds to.
4. Place the scanner machine right side up and flat on the table or self. Clear the scanner of any clutter, debris or other experiments. Please consult with Richard when doing this. The plates should be placed on a white background so add a piece of paper to the back if necessary. Unless you have explicit permission to stop and remove another experiment, don’t. You have four scanners so chances are, another one is open.
5. Place the plates that need to be imaged into the scanner. There are two options of orientation here: imaging through the top of the plates and imaging through the bottom of the plates. Imaging through the bottom of the plates is the better option but requires clear media such as phytagel to work properly.
6. In the computer, navigate to the Pictures directory. In Pictures, there should be a folder named Ariadne. In the Ariadne folder, create a new folder with the date of timelapse start, and any other important information.
7. Back in the scanning app, edit the default folder options. To do this, press the little @ button on the side of the query and select the folder you just made in step 6.
8. Set the time interval to the desired amount. Usually for slime molds, 30 min to an hour is a good option.
9. Hit the green scan button. The scanner should start scanning an image. Navigate to the folder created in step 6 to verify that a new image is there and that none of the petri dishes are cut off. If yes, you are all set. If not, adjust the petri dishes.

**Storage, Disposal and Clean up:**

For long term storage of images, keep in a USB stick or upload onto dropbox or google drive.

Please be courteous and remove the plates from the scanner after you are finished with imaging.