

## Mosquito SOP

- Each user needs to be accordingly trained and signed off on how to properly use the mosquito robot.
- Make sure that enough tips are left over in the reel to run your experiments. If uncertain, contact an administrator.
- Run a daily required test first, to ensure the mosquito is working properly. The program labeled “calibration” from the mosquito program menu is an excellent choice. If the calibration test fails, run the test program once again.
- Select the required program from the menu and launch it, regardless whether the desired program has been displayed on the screen already or not.
- Please ensure that you place the plates on the correct positions of the Mosquito platform to avoid a direct crash of the robot head. A crash will result in a head misalignment and a possible down time.
- Please make sure that the robot has a clear path in each direction before you run your experiments. There aren’t any sensors present on the robot and if the path is not clear, the sliding Mosquito platform will crash and misalign.
- Use the side notes to approximate the amount of protein that goes in each well. Failure to put enough protein will result in the robot dispensing air bubbles.
- When dispensing the protein into the protein reservoir, do not depress the pipette all the way as this will introduce bubbles into the reservoir.

## Minstrel Imager and Incubator SOP

- Each user needs to be accordingly trained on how to properly use both the database and imaging system before operating the system.
- Please login into the Crystaltrak database computer to ensure that the Crystaltrak database is running before operating the imager. If the database is not running then all communications between the imager and Crystaltrak have been lost and any requests by the user to the imager may result in the robot or the incubators coming to a halt.
- If the light sensors above the incubators are blinking green, that means the incubator is running a task. If the light sensors are blinking orange, that means the incubator has an offset of some sort and it's currently unavailable for use. If the light sensors are blinking red, please contact an administrator.
- Blinking sensor lights above the incubators indicate that the incubators are currently performing a task. Before opening the access doors to the incubators, please make sure that the incubator robots are not performing an already scheduled task. If request is initiated by the user while the incubator robots are in motion, then certain scheduled tasks could be disrupted and this could lead to an imager or incubator halt.
- When executing an "open door" request, make sure that the small load/unload access doors are the only doors being open in the process. Do not open the large main doors to the incubator as this will result in an inventory being triggered in which time no scans will be performed from that incubator. Do not open the horizontal plate door located below the monitor (load station).
- When handling plates in the cassettes, please make sure the plates are situated properly in the slots, pushed all the way in the back of the cassette with barcode facing outwards.
- Once plates are added to the incubators, please remain to ensure that the plates are properly picked up by the incubator robots. This can be done by viewing the interactive window on the screen. The slots where the plates were placed, once detected by the incubator sensors, will turn green color on the screen and you should observe the robot storing away the plates. Any red color on the screen indicates that the plate was improperly added to the incubator and you should contact the lab manager.
- When retrieving plates, use the manage plates button from the main screen. Select the plates needed, add them to the plate task list on the side. Use ONLY Retrieve plates to exit cassette button from the menu to retrieve your plates. Do not retrieve plates to the load station.
- If the imager is unresponsive please contact the administrator for assistance.