Dispensing Liquid with the Opentrons **(One Volume Across Plates)**

1. Place the plates you want to dispense to (without lids) into any available slots on the Opentrons deck. Place your solution to dispense in a reservoir (either divided or a single channel) on an available slot.
2. On the Desktop, double click “Opentrons GUI” to tell the robot where you would like to dispense and what volume. When you are finished, you can save and you should see “BenchItems.pkl” on the Desktop.
3. From the taskbar on the bottom of the screen, open the Opentrons app. Click to the “Devices” tab on the left. **If a pop-up about an update appears, click “Not now.”**
4. When the robot connects, the pipettes and previous runs will populate the screen. At this point, click the 3 dots on the top right and go to robot settings.
5. Click to “Advanced” settings and launch Jupyter Notebooks; it should open in your web browser.
6. Upload *BenchItems.pkl* from the desktop to this location using the button on the top right (**Note: you will have to click twice to confirm the upload!**).
7. Open the notebook titled *UpdateSingleDispenseList.ipynb* and click “Cell” then “Run All” at the top to run all cells of the notebook.
8. Navigate back to the Opentrons app and open the “Protocols” tab.
9. Find the “Single Volume Dispense Protocol” on the list of Protocols. Click the 3 dots on the top right and then “Run."
10. Make sure the device “ImmunodynamicsOT2” appears and click “Proceed to setup.”
11. The robot should now analyze the protocol on the robot. When it finishes loading, expand the “Labware Setup” section. If an option comes up to apply stored Labware Offset data, click “Apply stored data.”
12. In the Labware Setup section, you should see the reservoir + plates you picked in the correct slots of the deck. If not, “Cancel run” and follow the steps to run the GUI and upload *BenchItems.pkl* again.
13. If you are satisfied with the deck position, you can run a Labware Position Check if you want to double check labware offsets. Otherwise, proceed.
14. Click Start run/Proceed to run! The Opentrons should now dispense your desired volume to all your plates.