

Chemical dispensing for cryo-EM

- On the right is **our standard crystallization system** (Oryx4 or Oryx8). This is used to **dispense protein and other reagents** - with almost no waste - to a well on e.g. a Terazaki plate using the left arm.
- The drop (pink) is **mixed and picked up by a tip** (dashed red line) on the right arm.
- The **user then moves the tip** (dashed green line) to a plunge-freezing system. Mounted on a stand beside this is a split tube (yellow) with a carriage that has a magnet (dotted purple line) that holds the tip. The tip to be **moved into contact with the EM grid**.
- The **drop is dispensed** at a programmable speed to the grid. If desired, the drop can be pulled into and out of the tip several times etc.
- The tip is moved back and **the sample is frozen**.
- A new mixture is dispensed to the next well - **repeat** as desired!

