

## **Cryo SEM Startup**

1. Turn on Cryo large control box by large switch.
2. Once control panel initializes (the reset button lights briefly, then goes out) push the mechanical pump button to start cryo prepchamber pump down.
3. Change the conventional stage out for the cryo stage within the SEM sample chamber.
4. Fill the 40 liter tank with LN2 and a 4L dewar.
5. Attach the hose to the LN2 tank and begin gas flow to the SEM sample chamber.
6. Begin to cool the cryo prepchamber. Turn on the heaters for both cryo prepchamber and SEM sample chamber.
7. Once the SEM sample chamber has reached the proper vacuum (i.e. V3 is open and the beam could be turned on) begin to cool the scope sample chamber.

## **Cryo SEM Overnight Shut Down Checklist**

1. V3 is closed (the light is on at the side control panel) .
2. Ball valve between prep-chamber and sample column is closed.
3. Turbo put in standby (small switch below power switch on large control box).