## **Start-up Checklist**

- Wearing Badge near heart? Broad 14 room door closed behind you?
- RED X-ray light ON in enclosure? (But NOT yellow shutter light.)
- Door unarmed? (Do NOT open door if green Armed light is on!)
- Radiation check (Leave Audio turned on, turn off power when done.)
- Display panel (front left of generator)
  - Voltage/Current: 40kV/30mA
  - Vacuum (IG): < 185mV, < 0.3 mPa (instructions below panel)
- Helium tank (back wall): >200 psi in tank (1<sup>st</sup> gauge), flow at 20-40 (3<sup>rd</sup> gauge)
- LN2 refill tank (outside of enclosure): check fill level, liquid valve open
- Cryo: switch set to Auto (LN2 refill controller), dry air (set to 10-15), hit Start on blue temp controller, wait for initialization to complete, hit Start again to lower temp to 100K (or set temp with computer program), heater on (leave setting as is)
- Haskris (near computer): yellow/orange light on in front, green light on in back
- Sign Log book
- Detector at >350mm (CrystalClear, Instrument, Manual Instrument Control)
- Cryo stream centered and at correct height (use tool in small black box)

## **Before X-rays Checklist**

- Center sample, set Phi axis to zero and Lock
- Check BEAMSTOP!!!! (cup aligned, close enough to sample)
- Enclosure: shut, lock, arm (GREEN Armed light on!)
- Remove KEY from enclosure (not from room!)!

## **End Checklist**

- Detector at >350mm
- Log book
- Close CrystalClear

- Clean up
- Cryo stream PURGE
- Heater off