

# F20 Quick Checklist

## Start up:

- Cool down the microscope
- Center the stage before inserting specimen holder
- Once the specimen holder is inserted, do not open the column valves until the **IGP reading is below 20**
- Turn on 'Low Dose' function
- In low dose 'Search' mode, check the z height
- Switch to 'Focus' mode and press the eucentric height button
- Switch to 'Exposure' mode
- Check condenser and objective aperture alignments
- Under 'Direct Alignments' check gun tilt, gun shift, pivot point x and y, beam shift and rotation center alignments
- Switch to 'Search' mode and align 'Search' and 'Exposure' modes
- Collect new gain reference for K2 in Digital Micrograph using beam settings for 'Exposure' mode (see Instructions for Gatan K2 Camera)
- Adjust K2 configuration in Digital Micrograph for using either UCSF Image4 or SerialEM
- Set up 8 bit image stack collection for UCSF Image4, if necessary
- Begin imaging

## Shut down:

- Close the column valves
- Center the stage and remove specimen holder
- Log out of your account and log into guest account
  - Username: F20guest
  - Password: walzlab
- Start the 'Cryo Cycle', remove the liquid nitrogen dewar, place Styrofoam box beneath the coils and safely store the dewar on the desktop
- Transfer all of your images from the GPU to your own account/computer
- Heat the K2 to 50°C, set the time to as much as permitted. Leave one hour for k2 cooling down to -20°C before next user start.
- Sign the log book and note any problems

If you encounter any problems, or think anything is strange with the microscope, please contact Zongli or Sarah before continuing.