



Cryo-EM Merit Badge Independence Checklist

A Collaboration Among the NIH-Funded Cryo-EM National Centers

Tundra Independence Test Checklist – CryoEM Merit Badges

Trainee: _____

Preparing the Tundra

- ☐ ☐ Identify the following:
 - ☐ ☐ Status of TEM.
 - ☐ ☐ Status of CLS.
 - ☐ ☐ Status of TD.
 - ☐ ☐ Status of the Tundra workstation.
- ☐ ☐ Recover Microscope State in EPU.
- ☐ ☐ Cool down TEM.
- ☐ ☐ Insert carbon calibration grid.
- ☐ ☐ Run user alignments.
- ☐ ☐ Run optimize beam.

Preparing EPU

- ☐ ☐ Select Experiment Type.
- ☐ ☐ Atlas Optics Alignment.
- ☐ ☐ Calibrate Image Shifts.
- ☐ ☐ Calibrate IO.
- ☐ ☐ Set up EPU session.
- ☐ ☐ Unload the calibration grid.

Running EPU and the Tundra

- ☐ ☐ Check the temperature state of TEM and CLS.
- ☐ ☐ Insertion of sample.
- ☐ ☐ EPU session setup.
- ☐ ☐ Atlas Session Setup.
- ☐ ☐ EPU Template Definition and Execution.
- ☐ ☐ EPU Square and Hole Selection.
- ☐ ☐ EPU Automated Acquisition.

Shut down procedures

- ☐ ☐ End EPU session.
- ☐ ☐ Remove and save the sample from TEM.
- ☐ ☐ Cryo cycle TEM and CLS.

Supervising Staff 1: _____

Date: _____

Supervising Staff 2: _____

Date: _____