SerialEM Screening Independence Test Checklist – CryoEM Merit Badges

Trainee: _____

Section 1: Pre-screening Checks

Check:

- ❑ ❑ Autoloader Inventory
- ❑ ❑ SerialEM Server
- ❑ ❑ 150µm C2 Aperture Inserted
- ❑ ❑ Low Dose Mode
- ❑ ❑ Imaging States
  - ❑ ❑ Search
  - ❑ ❑ View
  - ❑ ❑ Focus
  - ❑ ❑ Record

Section 2: Screening

- ❑ ❑ Loads gird
- ❑ ❑ Opens Navigator window
- ❑ ❑ Saves LMM to correct project path
- ❑ ❑ Collects LMM
- ❑ ❑ Identifies __ gridsquares of interest
- ❑ ❑ Eucentric height calculated for each screened gridsquare.
- ❑ ❑ Properly centers hole to screen
- ❑ ❑ Adjust focus position correctly
- ❑ ❑ Defocus target within range
- ❑ ❑ Autofocus
- ❑ ❑ Acquires Record Image
- ❑ ❑ Saves Record Image
- ❑ ❑ Repeats screening steps on other gridsquares properly
- ❑ ❑ Saves LMM with target notations

Section 3: Shutdown

- ❑ ❑ Load Cross-Grating onto microscope stage
- ❑ ❑ Close all open maps
- ❑ ❑ Complete Independent Microscope Log

Supervisor Notes:

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Supervising Staff 1: _____ **Date:** _____

Supervising Staff 2: _____ **Date:** _____

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