



Negative Stain Independence Test Checklist – CryoEM Merit Badges

Supervising Staff: _____

Date: _____

Trainee: _____

Set up

- ☐ User can describe safety issues for working with stains.
- ☐ Proper PPE is worn.
- ☐ Equipment/supplies are prepared before starting procedure:
 - ☐ Timer
 - ☐ Sample and buffer
 - ☐ Stains
 - ☐ Ethanol and water for cleaning tweezers
 - ☐ Tweezers
 - ☐ Filter paper
 - ☐ Parafilm/kimtech wipes/scissors or other appropriate materials for handling stains
 - ☐ Pipette tips
 - ☐ Use of pipettors labeled for negative stain only
 - ☐ Sensible grid type is used

Working at the bench

- ☐ Protocols are performed in the designated controlled area.
- ☐ Grids are handled properly.
- ☐ Grids are plasma cleaned/glow discharged before use.
- ☐ Protein and stain are applied to the correct side of the grid.
- ☐ Stains are handled cautiously.
- ☐ Staining technique is done cautiously.
- ☐ Waste generated during the protocol is cleaned/disposed of properly.
- ☐ User knows to notify staff of any issues or stock shortages.

Clean up

- ☐ All tweezers are cleaned with water and ethanol and returned to respective locations.
- ☐ Used stain tubes, filter paper, kimtech wipes, parafilm, gloves, masks, pipette tips, and all other waste items are disposed of properly.
- ☐ PPE is put away/disposed of properly.
- ☐ Bench is left exactly as it was found.