

Preparing Quantifoil grids

Day 1

- Place three sheets of filter paper in the bottom of a 13x100mm glass petri dish (Whatman Grade 4, 90mm circles, Cat #1004 090).
- Dip each grid in a beaker of chloroform
- Place each grid (carbon-side down) on the filter paper
- After all grids have been treated with chloroform, saturate the filter papers by dropping amyl acetate around the filter paper stack using a glass Pasteur pipette (Electron Microscopy Sciences Cat #10815).
- Place another filter paper resting atop the petri dish (not touching the grids below) so there is about 20% of the petri dish opening remaining
- Loosely wrap the assembly in aluminum foil and leave overnight

Day2

- Remove the grids from the filter paper stack and place in a grid storage box, with the lid off.
- Place grid storage box in a bell jar with vacuum overnight

Day3

- Before blotting and freezing, use standard glow discharging of grids in Rockefeller EM facility
 - Place grids carbon side up on tacky insert of a small glass petri dish
 - Place petri dish in the glow discharge assembly atop the metal slab
 - Secure the lid to the assembly and close the valve
 - Evacuate assembly for 1.5min
 - Use 50% power for 10s
 - Turn off unit
 - Slowly release the vacuum on the assembly