

3/15/05

### **MEAD Lab Speedvac Instructions**

*The MEAD Lab Speedvac system was assembled from components generously donated by the following labs: Geeta, True (Wray), Dykhuizen, FERL. All of these components are pretty old and we do not have replacement parts, so we need to treat them with TLC. We also need to thank Walt Eanes and his lab for putting up with our use of their Speedvac for the last several months.*

**Please refer to the picture of the Speedvac system on the MEAD Lab site.**

- (1) Make sure the vapor trap (A) is on and showing a temperature of  $-30^{\circ}\text{C}$  or lower (if the pump is not down to temperature, drying will take longer than normal).
- (2) Place your samples in the centrifuge (B). Place the top down and turn the rotor on. Turn on the heat if desired. (Heat is generally OK for drying down sequencing reactions but may not be good for some genomic DNA preparations.)
- (3) Turn the stopcock lever on the bleed valve (C) perpendicular to the bleed valve hose.
- (4) Turn on the pump (D) (switch on upper back right).
- (5) Check vacuum by seeing if you can pry the lid up on the centrifuge. You should not be able to using moderate force. If the system is not pulling a vacuum check the bleed valve and other hose connections. Also, check that the centrifuge gasket is clean and in position and that the inside cover of the centrifuge is clean.
- (6) Check back in no more than 30 minutes. **DO NOT RUN SYSTEM OVERNIGHT OR FOR MORE THAN ONE HOUR UNATTENDED!**
- (7) Turn bleed valve stopcock lever parallel with hose. There will be a “whoosh” as the vacuum evacuates. Open the lid of the centrifuge. Centrifuge will stop spinning. If tubes are dry, turn off pump.
- (8) If tubes are not dry and more evaporation is needed, lower lid of centrifuge. Centrifuge will start spinning again. Turn bleed valve stopcock lever perpendicular to hose. Vacuum will re-establish (pump should still be on). Check that the centrifuge lid cannot be pried up. Check again in no more than 30 minutes.

15 ul post-sephadex sequencing elutions should dry down in roughly 30 minutes, with high heat. If you are eluting more than 15 ul, then you are probably not efficiently removing the water from the sephadex prior to applying the sequencing reaction. Volumes greater than 15 ul will take much longer to dry.

**Do not use the Speedvac system to dry down volumes greater than 50 ul.**