Instructions for setting the CO₂ mixer on the Leica AF6000LX microscope.

Only people who have been trained in the use of the CO₂ mixer may use this equipment. It has the potential to cause significant harm if misused.

These instructions assume that the CO_2 mixer has not been in use for several hours immediately before. If that is not the case you need to run the CO_2 mixer for at least an hour after the CO_2 cylinder supply was turned off and exhausted (all gauges reading 0).

- 1. DO **NOT** TURN ON THE CO₂ GAS CYLINDER.
- 2. Turn on the microscope in the normal way (A in picture below).
- 3. Check that there is enough distilled water in the bottle inside the 'hot box'.
- Turn on the CO₂ mixer control box (**B in picture below**) The switch (rocker type) is on the back, top left (as viewed from the normal operating position in front of the microscope, **C in rear view picture below**).



- 5. Wait for 10 minutes for the system to stabilise.
- 6. The CO_2 reading on the front should now be 0.
- If the reading is not 0 or says LO-CO2 adjust the rotary control on the back right hand side of the CO₂ control box until does say 0 (D in rear view picture above).

8. Observe for a few minutes and see if the reading remains at 0, if not adjust to 0 (it should look as shown below).



9. Turn on the gas cylinder (using the wheel valve on the cylinder top, **NOT** the black knob on the regulator) as shown during your training (below).



- 10. Tap the 2 gauges and check the readings LHS should have a fairly low reading but not 0. RHS should be between 8-10psi. If you cannot see a reading on the LHS side (cylinder pressure) gauge please email Colin to get a refill.
- 11. Gas should be bubbling through the water.
- 12. The gas demand valve should click on and off at intervals and the light on the LHS front panel should change between green and red.

The reading may well overshoot and go >5% at first but it will eventually stabilise at 5%.

If you are in any doubt about following these instructions or for further help or assistance please contact **Colin Gray on 0114 2159580** CG Ver 2.0