MAINTENANCE OF AIR COMPRESSOR

Overview: This protocol indicates the recommended maintenance of the air pressure line to avoid accumulation of water due to humidity. It is recommended to check for humidity every week.

Materials:
Bioprinter, air compressor, tubing, sterile standard 0.2 micron filter with luer-lock connections.

Protocol:

1. Drain moisture of the condensation trap of the air compressor by pressing on the valve.
2. Dry tubing by blowing air
3. If the printhead valves are clogged:
   a. First, disconnect the pressure like at the back of the printer.
   b. Then connect the pressure line from the compressor to the Printhead that is affected. Note: make sure to use an air filter in the pressure line when fouling this.
   c. Set the pressure at the air compressor to 200kPa and turn on the printer.
   d. In the "prepare bioprint" menu, select Turn on PH1 or PH2 to let the air pressure go through the pressure valve in a reversed direction. Turn on and turn off repeatedly (every 5 seconds for one minute). This will take away any debris that has collected at the pressure valve. Repeat a few times if necessary.
4. Place (or replace) the sterile .2 micron filter with a short piece of tube in the back of the printer, and connect the bioprinter and the filter to the pressure line with a longer sized tube.