**Covaris E220 Setup / Shutdown Instructions**

**(If this is your first time, please be assisted by someone with experience)**

**SETUP**

**1. Fill water basin and insert back into the instrument:**

 **Fill-0 for 12x12 tubes, Fill-10 for microtubes**

**2. Turn on chiller**

**3. Turn on Covaris**

**4. Turn on Computer if it’s been shutdown**

**5. Open the Application called “Sonolab”. The instrument should be detected and the lights turned on.**

**6. Click “proceed with homing”**

**At this stage the apparatus should descend into water and the degas pump should operate automatically.**

**7. When the H20 reaches proper temp, press green “DOOR” button to load samples and holder.**

**The button should be lit in order to operate door lock servo. If for some reason it does not light when instrument is not in operation, you may have to switch instrument off and turn back on. The door will not operate when the instrument is in operation.**

**8. Load your method from the drop down menu or create a new one by clicking “method editor”**

**9. When everything is ready, click “START” to start the process**

**“LOAD PLATE” button will raise the sample gantry out of the water**

**“SERVICE BATH” will raise both, the sample gantry and the chiller/degas apparatus out of water in order to remove the water basin.**

**SHUTDOWN**

**1. When all the samples are done being processed, click “LOAD PLATE” and “DOOR”, subsequently, to remove your samples.**

**2. Click “SERVICE BATH” and slide water basin out of instrument to dump water.**

**3. After replacing water basin, click “DEGAS” and override any warning.**

**This removes the extra water in the degas tubing.**

**4. Again, click “SERVICE BATH” and dump extra water.**

**5. Turn off instrument and chiller.**