Using the BioRad Sample Pump

- *The purge button requires that the sample valve be set on System Pump Inject Loop Sample Pump Waste
- ** to turn pump purge on/off you must press the purge button on the instrument

Before Use

- 1. Place sample pump line into your buffer
- 2. Click injection valve on screen and select section option: System Pump Inject Loop Sample Pump Waste
- 3. Press Purge on instrument pump, this will run buffer through the pump at 10 mL/min, run for 2 minutes to fully purge pump
- 4. Press Purge button to stop pump
- 5. Carefully transfer the line to your sample
- 6. Press the purge button again and watch the line up to the pump so that any air bubbles from the line transfer go through the pump
- 7. When you see the air bubble pass the pump press purge again to stop
- 8. On the instrument pump switch the valve back to the first option: Manual Load Loop System Pump to Column
- 9. Run your program

Cleanup

- 1. Cleanup pump- this is critical to avoid lysate etc. congealing in system
- 2. Transfer sample pump line into buffer
- 3. Click injection valve on screen and select section option: System Pump Inject Loop Sample Pump Waste
- 4. Press purge on instrument, run buffer for 1-2 minutes to clean out any excess lysate from lines, press purge to stop
- 5. Transfer sample pump line into water
- 6. Press purge on instrument, run water for 2 minutes, press purge to stop
- 7. Transfer sample pump line into 0.2-0.5 M sodium hydroxide
- 8. Press purge on instrument, run sodium hydroxide for 3 minutes, press purge to stop
- 9. Transfer sample pump line into water
- 10. Press purge on instrument, run water for 5 minutes, press purge to stop
- 11. On the instrument pump switch the valve back to the first option: Manual Load Loop System Pump to Column
- 12. Run pump wash program with water to clean out the entire system

Troubleshooting

- 1. If something does not seem right, check the sample pump for air
- 2. Check the light on the left side of the system, if there is air blue light will be on, but the sensor is not perfect, so proceed with step 3 even if it is not lit up...
- 3. Connect a 60 mL syringe to the bottom of the sample pump

- 4. Twist the valve to open and gently pull to remove air, stop when syringe is full of atleast 10 mL of liquid
- 5. Close the valve while the syringe is still connected