

Supplementary Figure 1

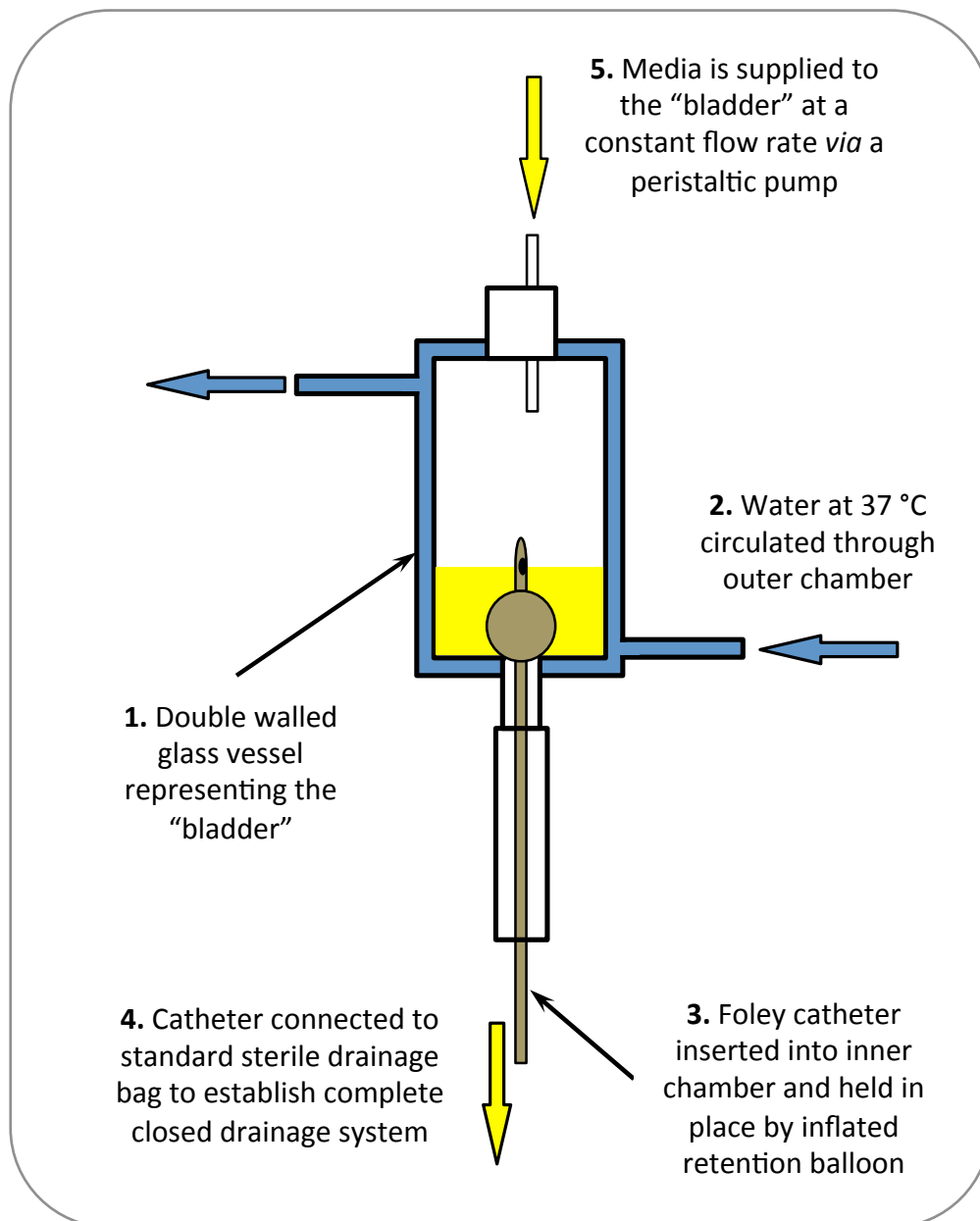


Illustration of the *in vitro* bladder model system (modified from Stickler *et al.* 1999, *Methods Enzymol* 310: 494-501). **1,2)** Water is circulated through the outer chamber of a double walled vessel to maintain the "bladder" at 37 °C. **3)** Catheters are inserted into the inner chamber and retention balloons inflated to form a seal and hold the catheter in place. **4)** Catheters are connected to standard drainage bags to form a complete sterile closed drainage system. **5)** Media is supplied to the "bladder" *via* an inlet at the top of the vessel and at a constant flow rate controlled by a peristaltic pump. Test strains are typically inoculated directly into residual media that pools below the catheter eye-hole. Blue arrows indicate water flow through the outer chamber. Yellow arrow indicates urine flow through the closed drainage system.