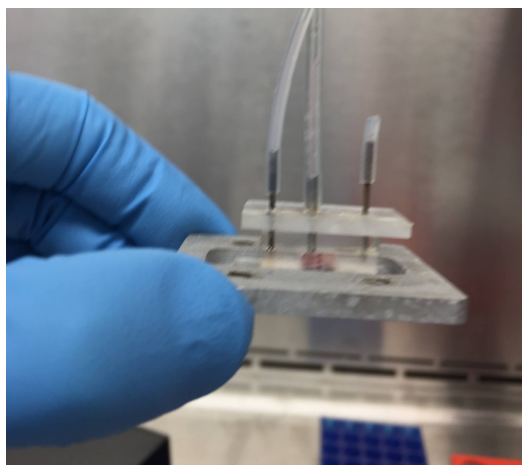


Plastic insert

PDMS slab

Aline- HUVEC in
bottom channel

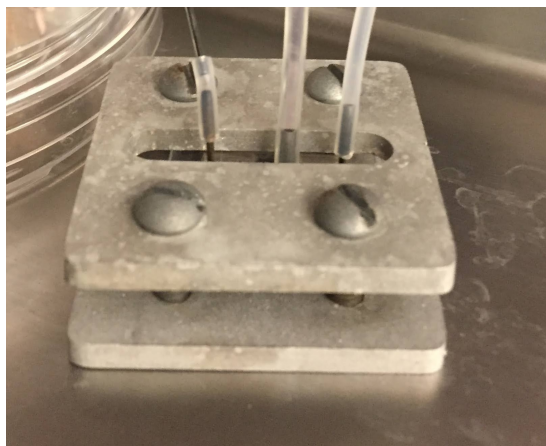


20G straight connectors

20G stub connectors

No stopcocks- minimized resistance

Finger tight screws, clamp "well port"
after screws tightened

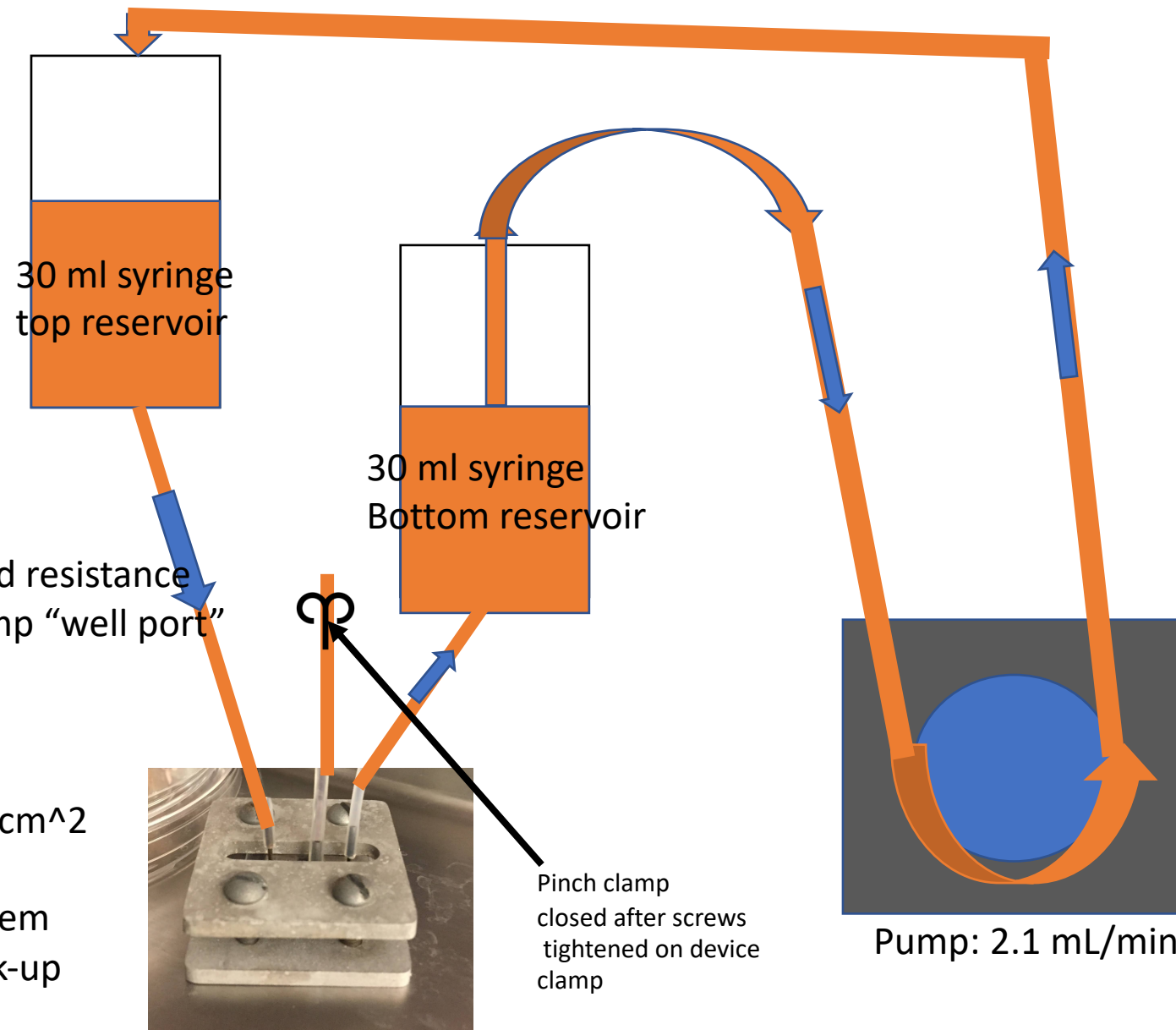


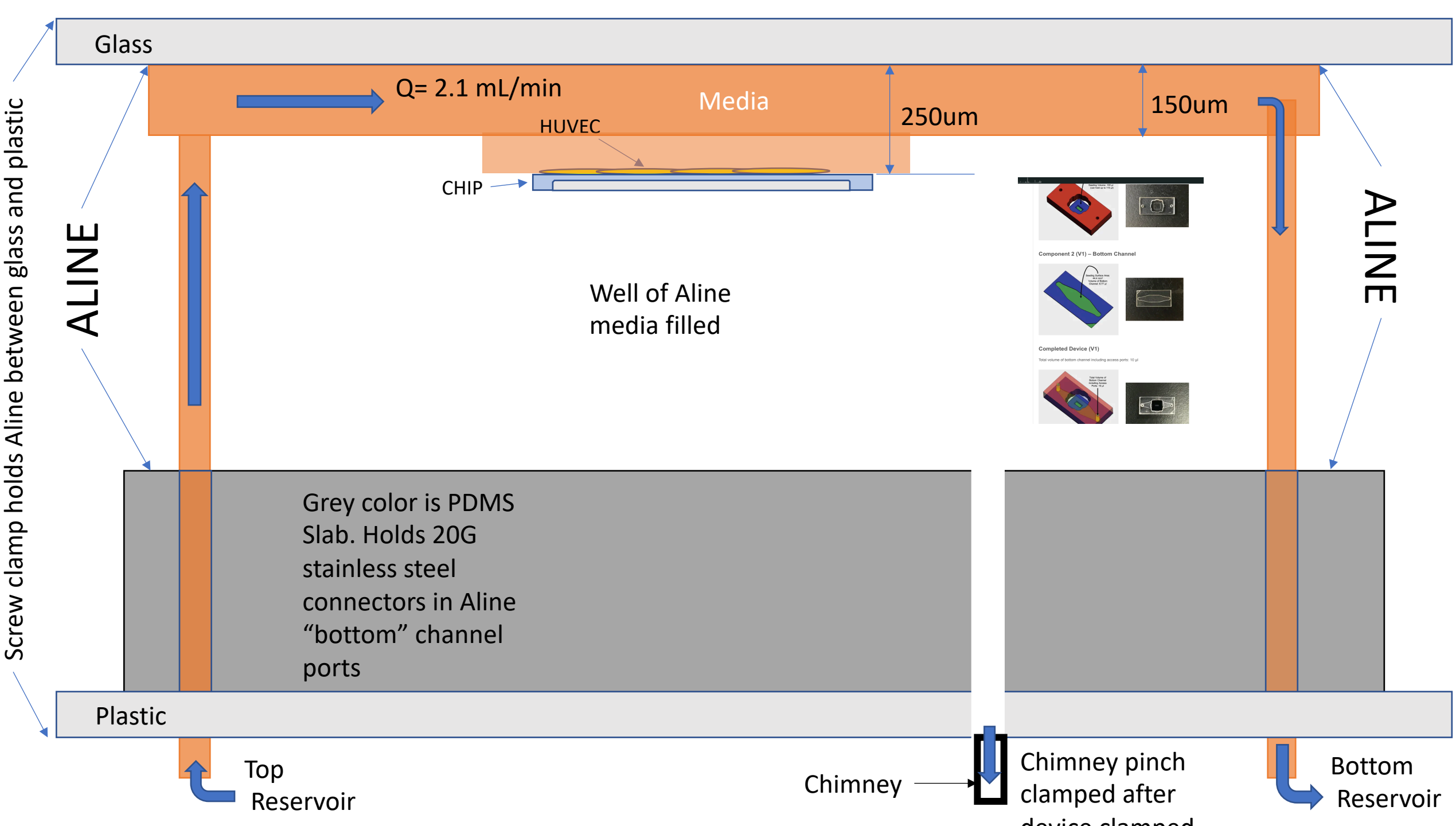
1. Seed HUVEC 40,000/cm²

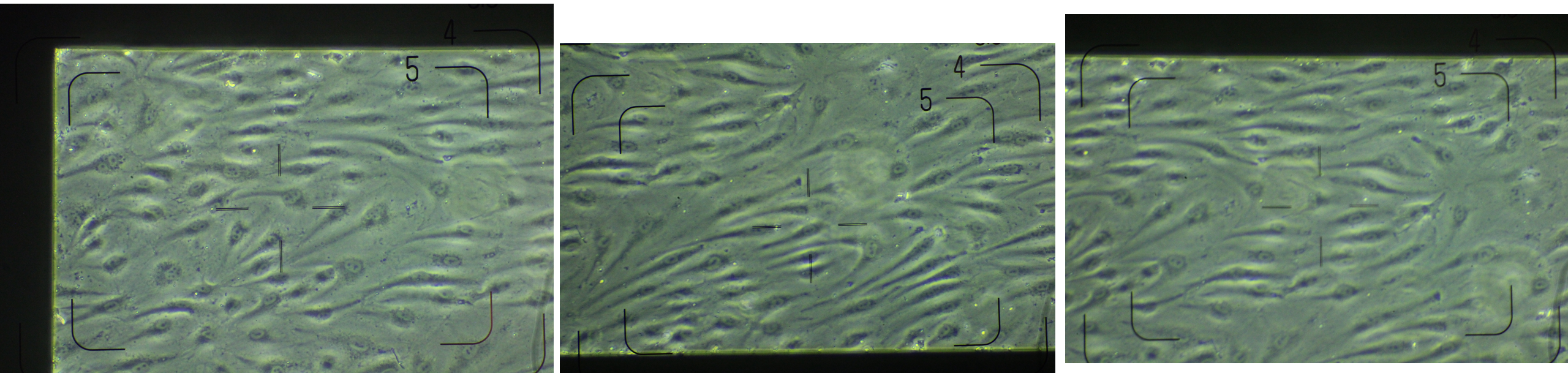
2. Wait ~24 hours

3. Aline into Clamp system

4. Wait ~4 hours to hook-up
& start flow







Pictures above are HUVEC on membrane, Bottom channel of Aline, 3 days at ~ 2.1 mL/min or 10 dynes/cm²

Shear Stresses at Q=2.1mL/min in channel
when Shear Stress at membrane is 10 dynes/cm²

