FBS adhesion

Design

The unsupported PLCL material when washed begin to curl in on itself, making submersion difficult if the scaffolds are not held down. Thus the need for a weighted ring that sits in the well plates and can be used to apply downward force evenly around the perimeter of the scaffold so as not to damage the material with tweezer points.

12 well plates have a standard diameter of 22.1 mm at the base of the well, with a clearance of 0.1 mm and a printer error of 0.05, there must be a maximum dimension between any two points of 21.95mm or the ring is likely not to fit in the well. Be careful when scaling the .stl file in Ultimaker Cura software, as the protrusions may not line up with the X and Y dimensions and scaling the dimensions to fit the aforementioned tolerance would result in an oversized print.

Observations:

The surface of the DBD treated PLCL wetted better than the controls during the initial wash, this is expected since it has a greater surface energy. Wait for FBS interaction

Confocal microscopy fixation