



**Supplemental Figure 1: Bioreactor Design and Assembly.** A) The lung or lobe is cannulated via the airways (trachea or bronchiole) and the vasculature (PA or artery) for decellularization. B) The decellularization chamber consists of a cylindrical glass reservoir fitted with a threaded plastic gasket and cap equipped with air filters, a syringe port, and perfusion line. The container is perfused via a gravity-driven system and maintained at a constant pressure head of 20 mm Hg.