HOW TO COLLECT CORD BLOOD AND PLACENTAL BIOPSIES

BEFORE DELIVERY, GATHER MATERIALS:
[] 1 collection baggie and 1 collection box (located in large biohazard bags under COVID fridge in dirty utility)
[] Non-sterile gloves
[] A surface to work on – can use area near sink in L&D room or a silver cart in OR (cover with chux pad)

PART 1. Cord Blood Collection:
1. Draw 20 ccs of blood **directly off cord prior to placental detachment but after clinical collection** in a 20 cc syringe attached to 18 g needle.
2. Fill blood tubes (by puncturing tops with needle) in the following order:
   1. SST (“tiger-top” tube) with 5 mL
   2. 1st EDTA (“purple-top” tube) with 5 mL
   3. 2nd EDTA (“purple-top” tube) with 5 mL
   4. PAXgene (liquid-filled red-top tube) with 2.5 mL
   *shake tube vigorously - contents may solidify
   If you have extra blood, fill extra purple-top tubes – can obtain from L&D
3. Using clean gloves, place tubes into **1st blue biohazard sealed bag**.

PART 2: Fetal Side Placenta Biopsies:
1. Locate area central on placenta at least 3-5 cm from the cord insertion (avoid edge, calcifications, hemorrhage, masses, infarctions, vessels)
2. Use forceps and scissors to cut TWO ~1cm biopsies of placenta
3. Cut off and **DISCARD** membranes
4. Thoroughly rinse biopsies in petri dishes with “DPBS” (large tubes)
5. Place each piece into separate 15mL tubes labeled “Plac-F” (each box includes 2 “Plac-F” tubes, one for each biopsy)
   *Ensure that biopsies are completely submerged in liquid

PART 3. Maternal Side Placenta Biopsies:
1. **Flip** placenta over to Maternal Side
2. **Blot** surface with gauze to remove excess blood
3. **Repeat** Steps 2-5 above (for Step 3, cut off decidua which is the grayish top layer of maternal side)
4. Place each piece into separate 15mL tubes labeled “Plac-M” (each box includes 2 “Plac-M” tubes, one for each biopsy)

AFTER COLLECTION:
- Place 15-mL “Plac-F” and “Plac-M” tubes back inside the **white box**. Using clean gloves, place white box into labeled medium clear biohazard bag. Store box in **COVID STUDY fridge at 4°C until pickup**.
- Using clean gloves, place **1st blue biohazard sealed bag** with cord blood tubes into **2nd blue biohazard sealed bag**, keeping outside of 2nd bag as “clean” as possible. Store bag in **pink COVID STUDY basin on counter in dirty utility room at room temperature until pickup**.
- Complete **pathology requisition** order in Epic. Specify “FOR COVID19 BIOREPOSITORY” and any separate clinical indications for the pathology evaluation, and write “biopsies were taken from the placenta”