Instructions for Demise Cytogenetics on L&B:

**ORDERING SAMPLES**
In EPIC, order both Chromosome analysis (Cytogenetics) [LAB10403] and Microarray/Array CGH (Cytogenetics) [LAB10401]. Under Specimen Type, please choose “Products of conception” for both. Do not put anything under specimen source. Write the sample source in the comments, usually fetal skin and placenta. Diagnosis will usually be IUFD, ICD-10 Code O36.4.

**COLLECTING SAMPLES**
Supplies needed: suture removal kit, biohazard bag, two pink tubes “cytogenetics media” from the small research fridge in 443B (Soiled Cart Holding) just outside of triage to the right. For sample collection, the fetus and placenta may be taken to an empty patient room or dirty utility room. Samples should be taken from the fetal thigh skin/fascia lata AND placenta and then placed in two separate tubes. Place printed EPIC labels on each tube length-wise (do not wrap them around the tube!).

For the placental biopsy, you need to distinguish placental chorionic villi from maternal tissue, look for fronds once the sample is placed in media (HINT: it looks like ferning or coral – see photos below). Since you may be unsure if you have placental villi, on the placenta pathology form, write “Please send villi to Cytogenetics.”
STORING SAMPLES
Place fetal tissue and placental biopsy in two separate pink tubes (nursing can print two requisition lab labels since the two orders print on one label).
- *If collected overnight or on the weekend*, place samples immediately in research fridge until morning/Monday and then:
  1. Write CYTOGENETICS on whiteboard in sign out room to remind everyone.
  2. Email autumn.diadamo@yale.edu, cytogeneticslab@yale.edu, and the oncoming chief to tell them there is a pending sample.
- *If there are no tubes*, then more need to be procured from the cytogenetics lab. The lab is open Monday through Friday 9am to 5pm; call 203.785.2146 to request media (you will need to pick them up). If overnight or the weekend and no media can be found, it is possible (but not ideal) for the tissue to be placed in gauze dampened by saline. Do NOT submerge sample in saline.

DELIVERING SAMPLES
A resident must walk to the cytogenetics lab and hand deliver the sample (see directions below). The samples MUST be brought to the lab as soon as possible for optimal testing. Once there, hand over the sample and fill out the manifest log. Please pick up more pink tubes at this time and replace them in the research fridge.

**Directions to Cytogenetics Lab WWW 338:**
Walk on the third floor toward FMB (and didactics room). Once crossing the bridge, take the first hallway on the left directly past the Department of Pediatrics Respiratory Medicine. Walk down hallway until the end and turn right. The cytogenetics lab is at the end of this hall on the right.

**CHECKLIST**
- [ ] place cytogenetics orders in EPIC
- [ ] gather suture removal kit, biohazard bag, two sample tubes with media
- [ ] collect fetal skin sample
- [ ] collect placental biopsy sample
- [ ] place a sample label on each tube
- [ ] write “Please send villi to Cytogenetics” on placental pathology form
- [ ] walk samples to cytogenetics lab
  - [ ] if nighttime or weekend, store samples in research fridge and email Autumn and chief
- [ ] collect more pink tubes and place them in the research fridge