I PURPOSE

The purpose of the catheter allows for administration or withdrawal of formula or fluid to the piglet.

II SCOPE

This procedure provides instructions for preparation of the catheter apparatus. The catheter itself must be affixed so that fluid may be easily administered or withdrawn.

III RESPONSIBILITIES

It is the responsibility of Metabolic Assessment Laboratory personnel to follow this procedure. It is the responsibility of supervisory personnel to ensure compliance with this procedure and to train employees and students responsible for performing this procedure. Students will report accidents to the principal investigators immediately.

IV REFERENCES

N/A

V REAGENTS AND MATERIALS

V.A. 1 yellow 16 gauge luer stub adapter
V.B. 2 purple 20 gauge luer stub adapters
V.C. 3 locking luer male catheter injection plugs
V.D. 1 gastric catheter
V.E. 1 bladder catheter
V.F. 1 venous catheter

VI EQUIPMENT

N/A

VII SAFETY PRECAUTIONS

VII.A. Members of the MAL have been trained extensively in the procedures described in this SOP.
VII.B. Members of the MAL have completed animal contact training in order to work in the PNICU.
VIII  DEFINITIONS

VIII.A. Standard Operating Procedure (SOP) – Standard Operating Procedure is a document that provides instructions for completing a specific task in the lab.

VIII.B. Metabolic Assessment Laboratory (MAL) – The Metabolic Assessment Laboratory is the laboratory that will use this SOP.

VIII.C. Piglet Neonatal Intensive Care Unit (PNICU) – The PNICU is a unit where the piglet is monitored by 24 hour care and routine check-up parameters using PNICU SOPs conducted by the MAL.

VIII.D. Clean Person—The Clean Person is designated to open and touch non-sterile items to maintain the integrity of the sterile person and surgeon.

VIII.E. Sterile Person—The Sterile Person is designated to handle all sterile instruments and materials that will be used inside the piglet. The Sterile Person also passes instruments to the surgeon.

IX  PROCEDURE

IX.A. The catheter apparatus will be assembled prior to the survival surgery.
   IX.A.1. Refer to SOP# CP048 for personal protective equipment use.
   IX.A.2. Refer to SOP# CP057.00 for donning gloves.

IX.B. The clean person dumps all of the autoclaved catheters onto a sterile dump towel.
   IX.B.1. There should be one venous, one gastric, and one urinary catheter.

IX.C. The clean person obtains the catheter injection plugs.

IX.D. Remove the catheter injection plugs from their package and place them on the medicine tray using the sterile technique.
   IX.D.1. The catheter injection plugs come encased inside a plastic tube.
      IX.D.1.a. The tube must be uncapped by the clean person. The clean person must make sure to not actually touch the injection plug itself.
      IX.D.1.b. The sterile person should remove the injection plug while the clean person is holding the package, making sure not to touch the package.
   IX.D.2. The sterile person should immediately place the injection plugs on the medicine tray.

IX.E. The clean person obtains the luer stub adapters.
   IX.E.1. The clean person should obtain one 20G yellow and two 16G purple luer stub adapters.
      IX.E.1.a. Next, the clean person unwraps all of the luer stub adapters and places the contents onto the dump towel.

IX.F. All three catheters, injection plugs, and luer stub adapters should be on the medicine tray at this point.

IX.G. Assemble each catheter apparatus.
   IX.G.1. The sterile person should be the only person assembling the catheter apparatus.
      IX.G.1.a. Take the luer adapter and screw it on to the catheter injection plug. Do this for all three luer adapters and plugs.
      IX.G.1.b. To remove the luer adapter cap, use one hand to apply pressure at the
base of the luer adapter cap to break the seal. Throw away the luer adapter cap once it has been removed. Do this for all three luer adapters.

IX.G.1.c. By now, you should have three uncapped luer adapters attached to catheter injection plugs. Two of the luer adapters should be purple, and one should be yellow.

IX.G.1.d. Take the yellow luer stub adapter and slide it into the end of the venous catheter furthest away from the plastic ring.

IX.G.2. The luer stub adapter should be inserted as far as possible using a twisting motion to assure a tight seal.

IX.G.2.a. Take one of the purple luer stub adapters and twist it into the end of the gastric catheter that looks most like a plain, straight tube.

IX.G.2.b. Take the last purple luer stub adapter and twist it into the end of the bladder catheter that does not have the filter on it.

IX.G.3. Repeat all steps for additional sets of catheters.

IX.H. If additional medications are set up with the catheters, refer to SOP# CP051.00.
X ATTACHMENTS

X.A. For a list of materials and their locations, refer to SOP# CG098.00.