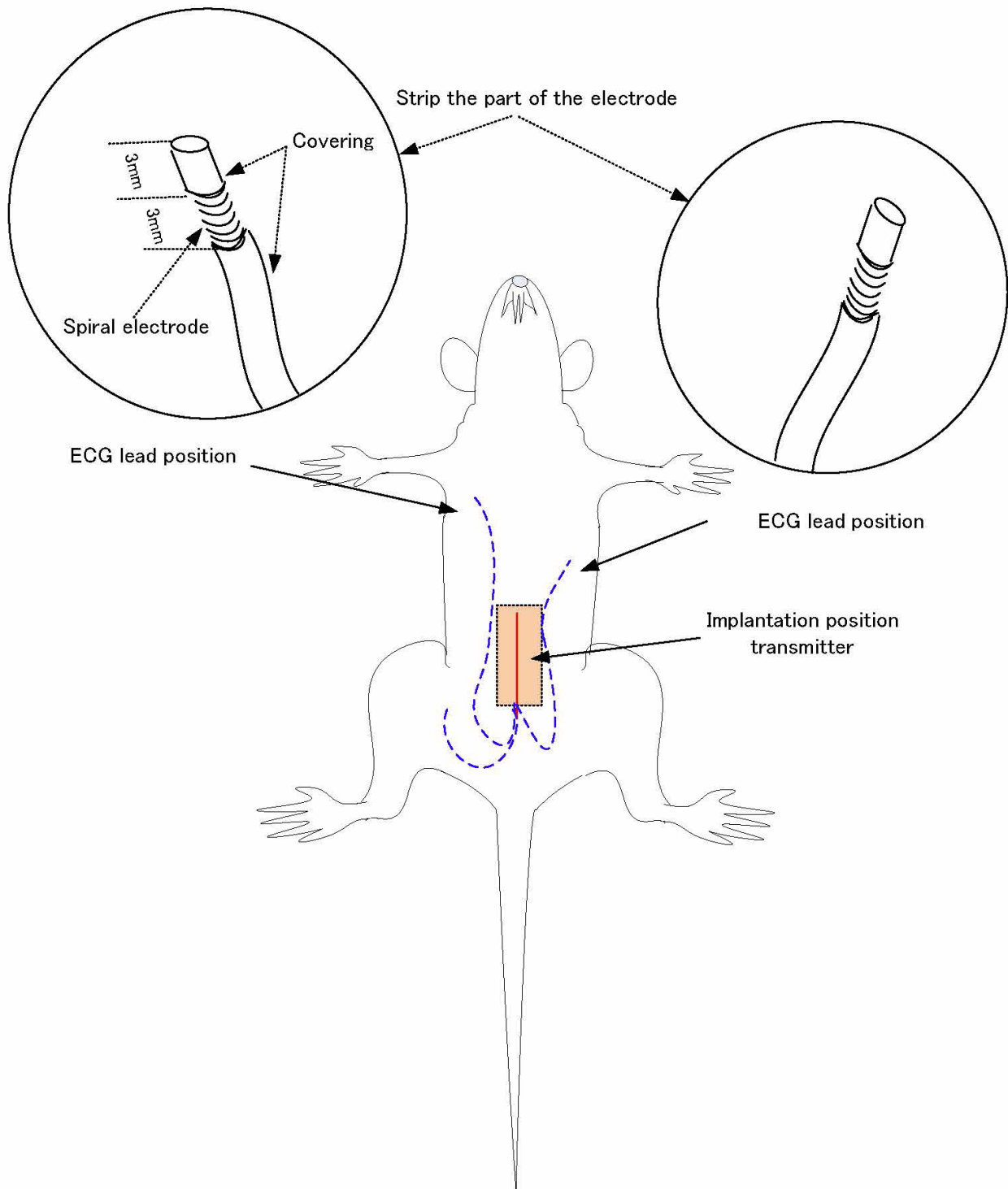
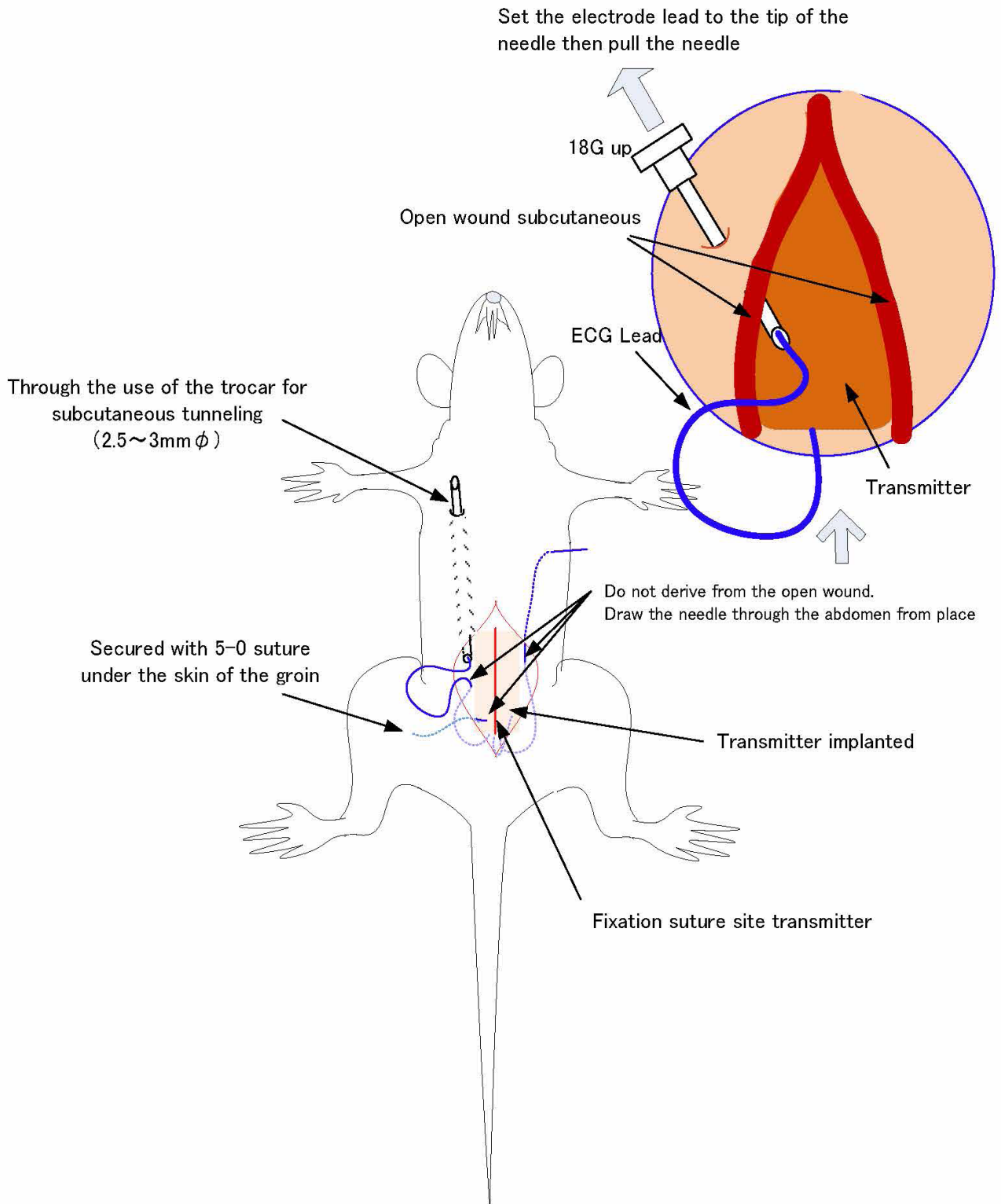


Stellar Telemetry: Implanted Transmitter (ECG)

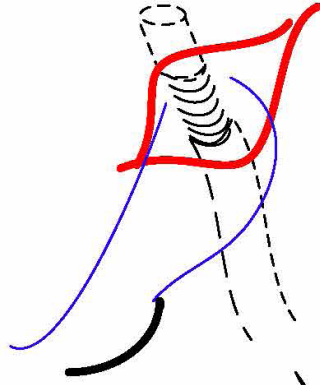


Stellar Telemetry: Electrode derived from intraperitoneal

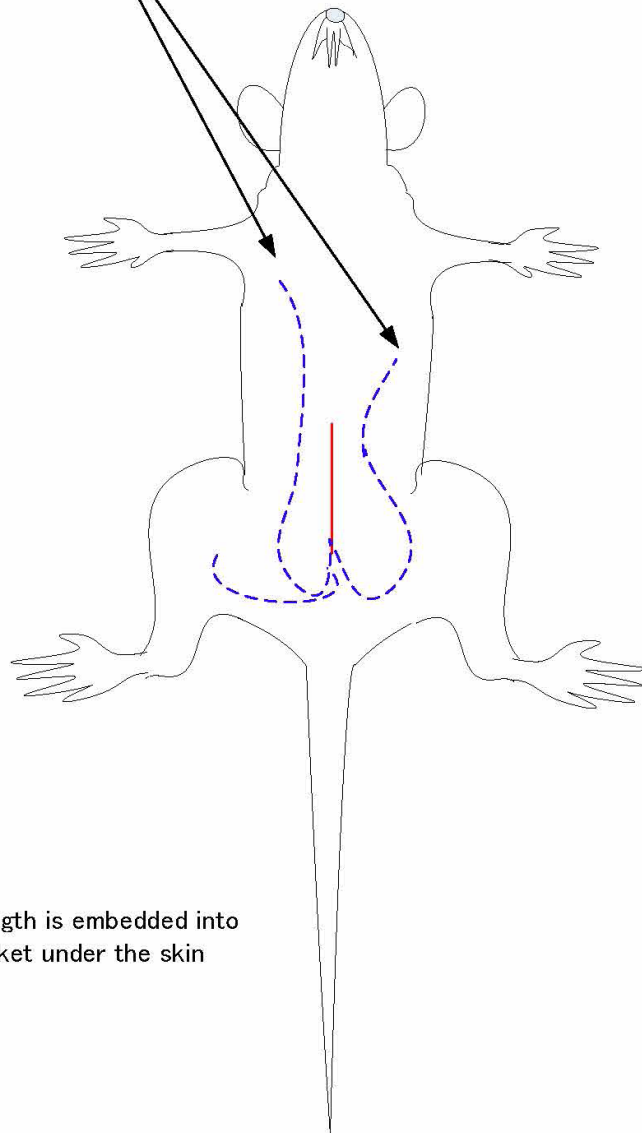
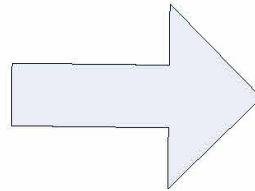
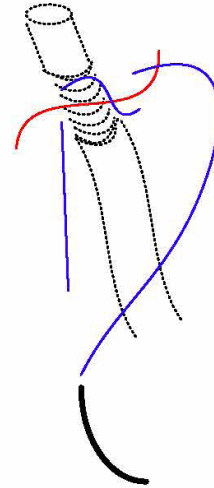


Stellar Telemetry: Fixing the electrode to the subcutaneous

Secure the electrode with 5-0 sutures to the muscle layer of subcutaneous

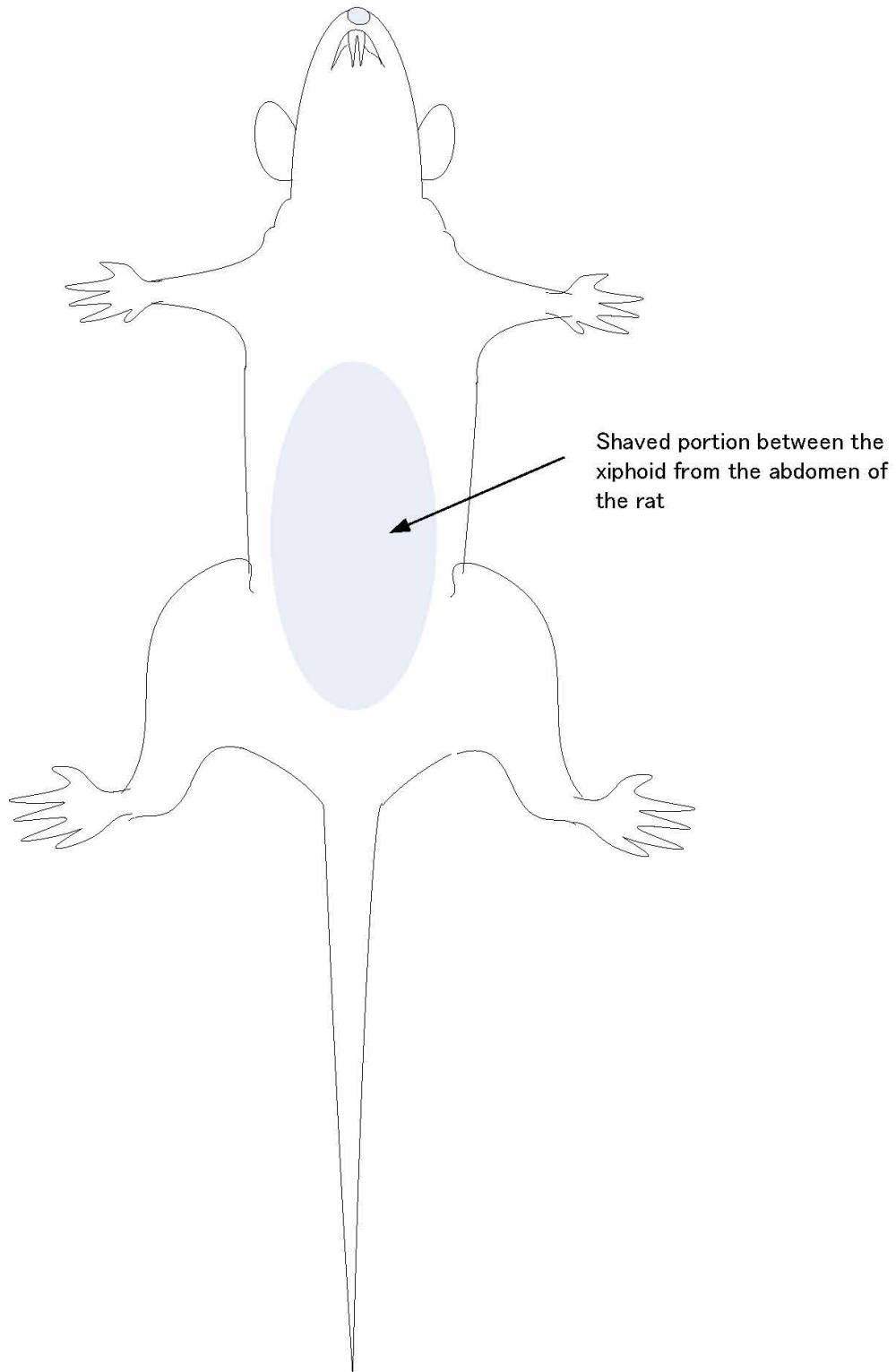


Make the skin sutured using 3-0 sutures

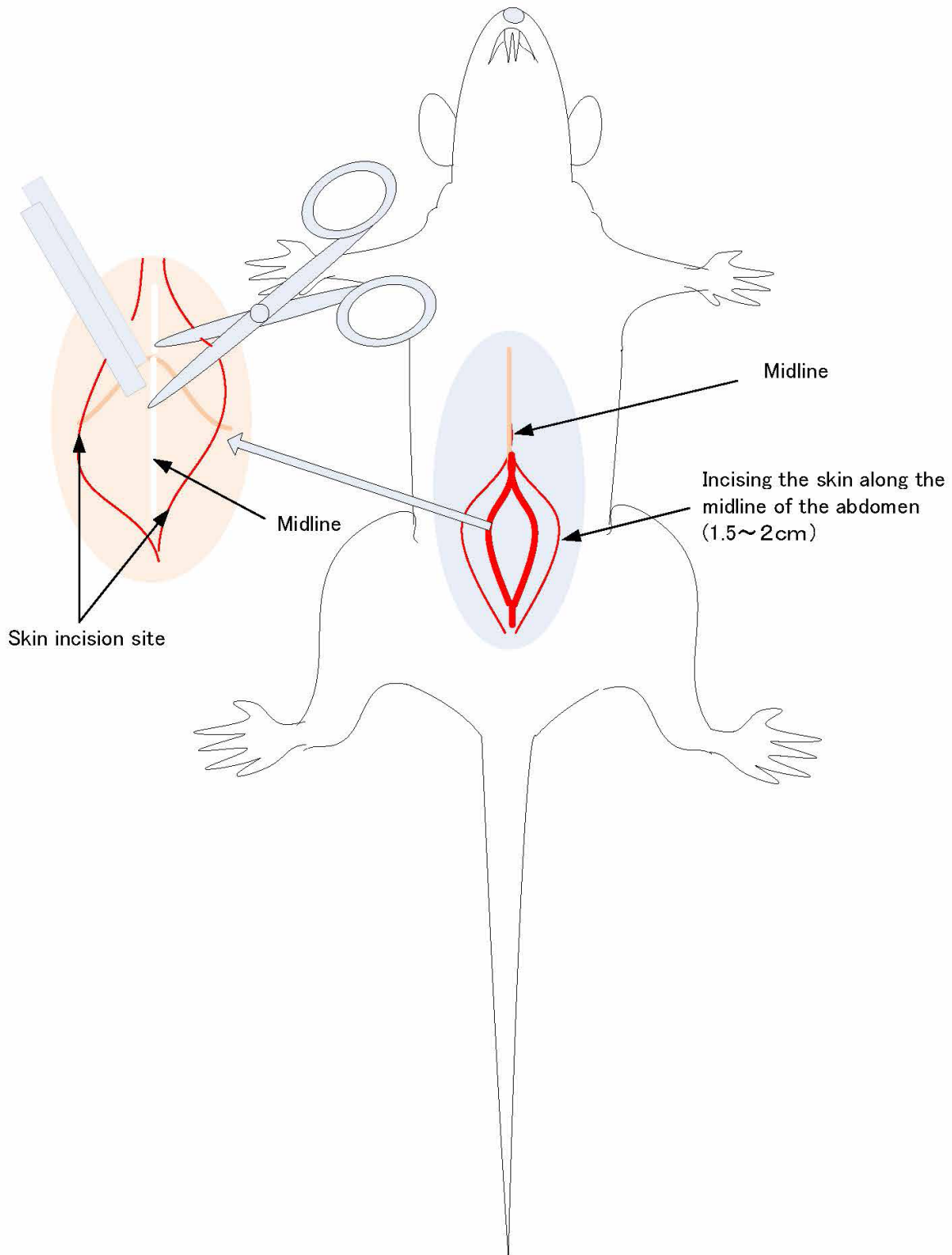


Excess electrode length is embedded into it to create a pocket under the skin

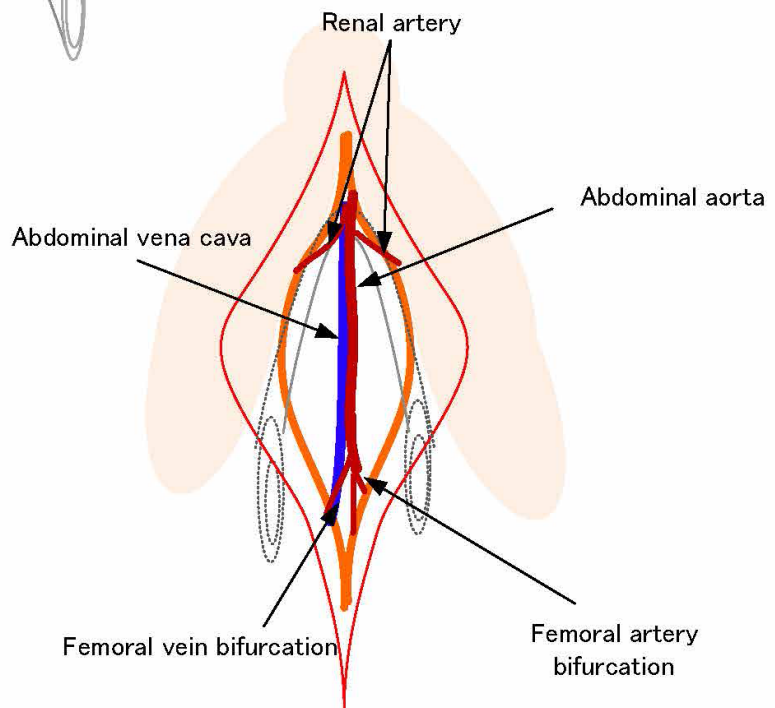
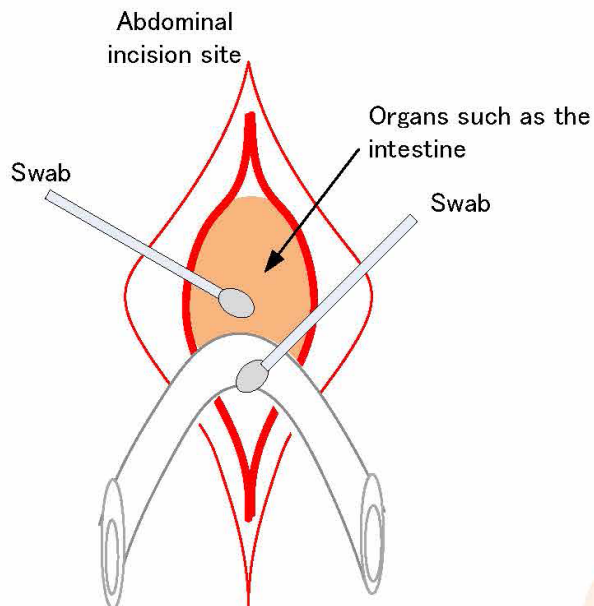
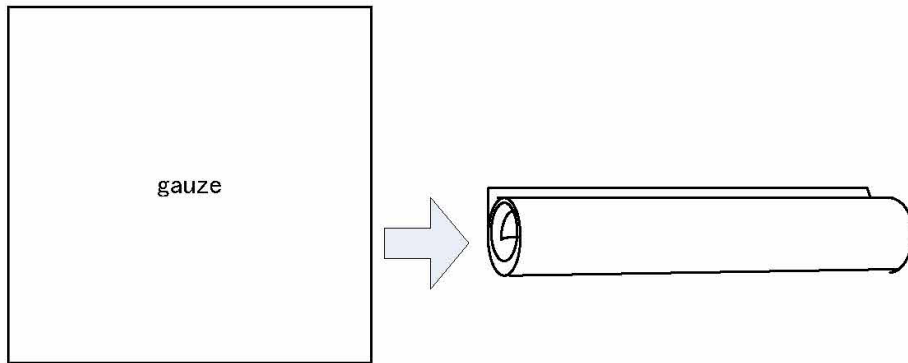
Stellar Telemetry: Implanted Transmitter (BP)



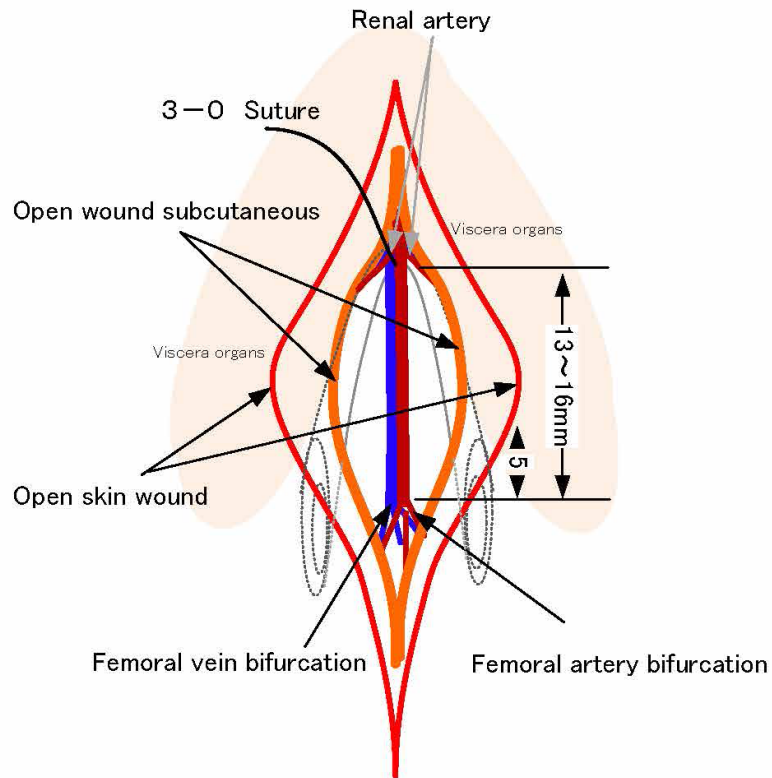
Stellar Telemetry: Ensuring the implantation site blood pressure measurement sensor



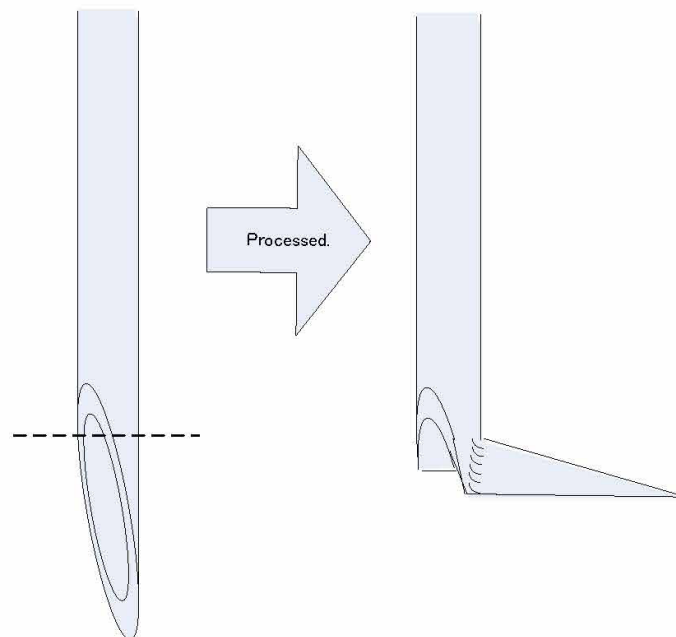
Stellar Telemetry: Exposure of the abdominal aorta



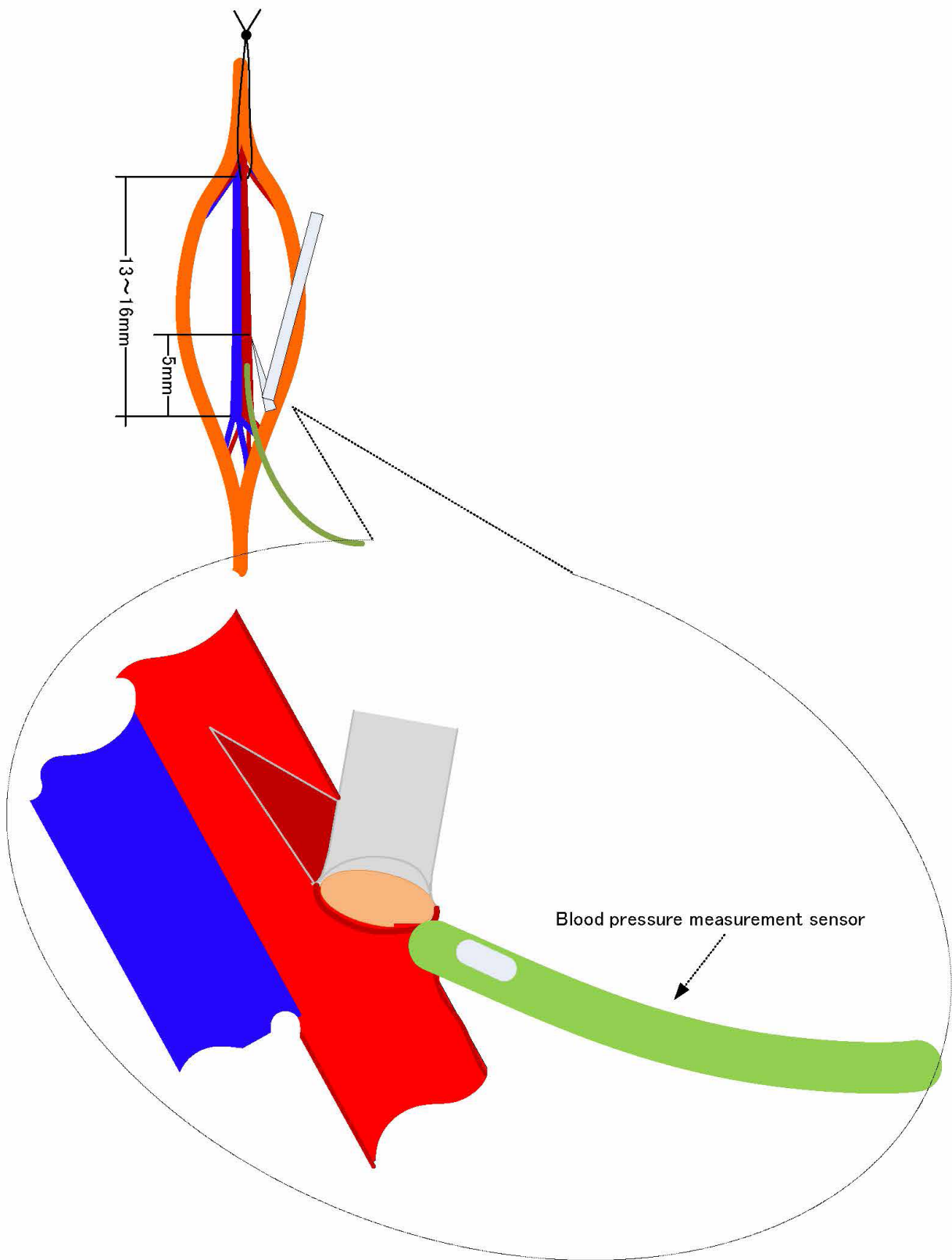
Stellar Telemetry: Separation of the blood vessel sensor introduction



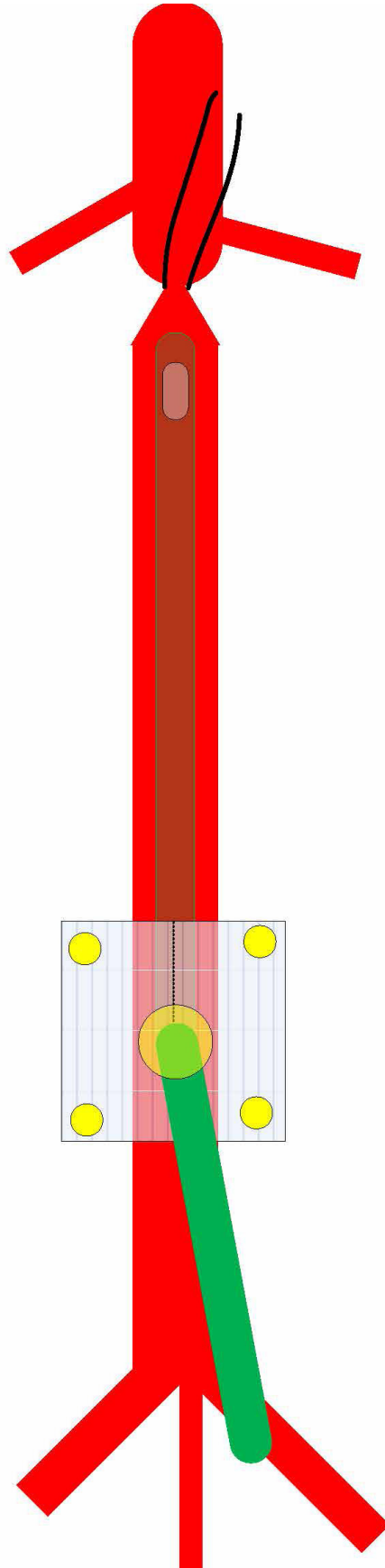
22G~23G Needle



Stellar Telemetry: Sensor placement method to the abdominal aorta



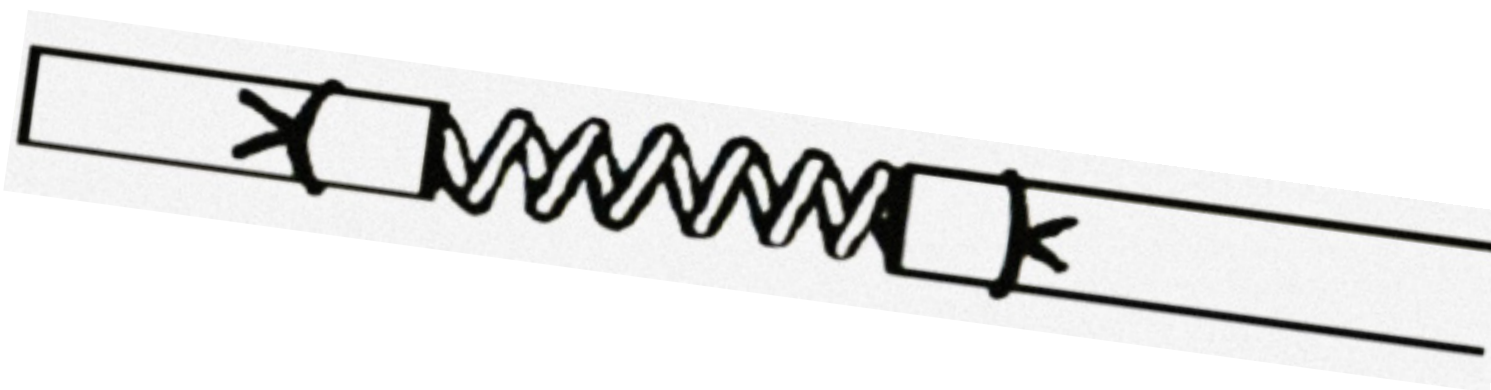
Stellar Telemetry: Removal of the introducer catheter pressure sensor



Stellar Telemetry: Placement of the ECG leads

If you have placed the transmitter on the dorsal flank, first tunnel the leads subcutaneously to the desired ECG electrode locations.

1. Shorten the lead material to the appropriate length with a pair of scissors. A small amount of lead may either be coiled under the skin or left in the abdominal cavity to account for growth of the animal and re-use of the transmitter. However too much lead material could result in skin necrosis or strangling of the intestines.
2. Cut around the silicone tubing at the tip of the lead using a sharp sterile scalpel blade and remove approximately 1 cm of the silicone tubing to expose the stainless steel wire. This portion of silicone tubing should be completely removed from the lead.
3. Place a pre-made tip cover onto the end of the exposed wire and rotate it counterclockwise until it is firmly attached to the wire. 1 pre-made tip covers are not available, they can be made by using the excess silicone tubing. After the silicone tubing is cut, pull it to the end of the lead but do not remove it from the lead. Tie a piece of 5-0 or 6-0 non absorbable suture around the silicone tubing and lead to secure the tubing in place. Cut off the excess silicone tubing that extends past the lead as this is not needed.
4. Place another suture around the silicone tubing just proximal to the exposed portion of the wire. This will inhibit fluids from migrating along the interior of the lead.
5. Ensure steps 2 through 4 are completed for each lead.
6. Grasp the terminal end of the negative lead (clear tubing) with a small hemostat and tunnel it subcutaneously from the abdominal incision to the right pectoral muscle.
7. Release the lead and withdraw the hemostat leaving the lead in place under the skin.
8. Grasp the terminal end of the positive lead (red tubing) with a small hemostat and tunnel it subcutaneously from the abdominal incision to the left caudal rib region. This lead is positioned approximately 1 cm to the left of the xyphoid process.



Stellar Telemetry Cleaning

All transmitters returned to TSE-Systems must be sanitized and sterilized. Transmitter return is subject to US Department of Transportation regulations; applicable regulations by US DOT, ICAO or your preferred carrier. TSE-Systems requires a 3-step sanitation and sterilization procedure for the return of transmitters.

1. Detergent Sanitization

Enzymes, usually proteases, are often added to neutral pH solutions to assist in removing organic material. Enzymes in these formulations attack proteins that make up a large portion of common soil (e.g., blood, pus). Cleaning solutions may also contain lipases (enzymes active on fats) and amylases (enzymes active on starches). These detergents should be used in accordance with the manufacturer's instructions, which include proper dilutions and specified amount of soak time 1.

TSE-Systems recommends:

- Terg-A-Zyme ® (Alconox, Inc.) – 1% solution in water, 4-72 hours
 - Haemo-Sol N.S. (Orange Label) – 0.5% solution in water, 4-72 hours
- Following soak, please rinse thoroughly under running water.

2. Chemical Sterilizer

Sterilization as a definition terminates all life, whereas sanitization terminates selectively and partially. Both sanitization and disinfection reduce the number of targeted pathogenic organisms to what are considered "acceptable" levels 2. Though sterilization can be achieved through several methods (appropriate combinations of heat, chemical, pressure, irradiation, filtration), TSE-Systems requires chemical sterilization via peracetic acid-based products (Actril).

3. Sterile Saline

Sterile saline should be used as a rinse to remove all traces of the chemical sterilizer. Rinse and allow to dry prior to return shipment.

1- CDC: http://www.cdc.gov/hicpac/Disinfection_Sterilization/5_0cleaning.html

2- Wikipedia: [http://en.wikipedia.org/wiki/Sterilization_\(microbiology\)](http://en.wikipedia.org/wiki/Sterilization_(microbiology))