



# Intralateral Ventricular Cannulation for Pump Connection

Surgery Code: IVCTUBING

The intralateral ventricular cannulation for pump connection model is of benefit to preclinical or research studies involving routine dosing or infusion to the brain using a pump (e.g., osmotic pump).

## Animal Models

Typical selections are listed below; however, choices for strain, age and weight may be limited due to model anatomy and/or physiological conditions.

- Rats: male/female, any strain, weight  $\geq$  150 g
- Mice: male/female, any strain, weight  $\geq$  20 g

## Procedure Details

- **Perioperative care:** Please view our Pre- and Postoperative Care Sheet, which can be found at [www.criver.com/opcare](http://www.criver.com/opcare).
- **Housing:** The animals must be singly housed with adequate clearance to prevent the cannula from coming in contact with the lid.
- **Diet:** No special diet is required.
- **Postoperative holding period:** At a minimum, post-op animals are held 2 days, with the majority of animals shipping within 7 days of surgery.
- **Maintenance:** Catheters should be maintained following the Charles River Handling Instructions, which can be found at [www.criver.com/handling](http://www.criver.com/handling).

## Surgical Summary

The animal is placed in the stereotaxic apparatus and the bregma and lambda are identified. Four anchoring screws are mounted onto the skull. A guide cannula with

attached polyurethane/silicone tubing is loaded into the holder of the stereotaxic apparatus. The tip of the cannula is placed over the specified target following predetermined coordinates. A hole is drilled into the skull and the guide cannula is lowered into the brain. A layer of powdered bone graft material is applied to affix the cannula and cover the exposed portion of the skull, and a small amount of bone graft liquid is applied to the powder. The tubing is tunneled subcutaneously to the scapular incision and exteriorized.

## IACUC

The Charles River Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including all anesthesia, analgesia, animal preparation and any post-operative holding in Charles River facilities prior to shipment. Review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.

## Contact Us

For more information, visit [www.criver.com/surgery](http://www.criver.com/surgery). For specific surgery-related questions, please contact our technical experts at 1.877.CRIVER.1 (1.877.274.8371) or [askcharlesriver@crl.com](mailto:askcharlesriver@crl.com). To place an order or get a quote, contact our Customer Service Department at 1.800.LABRATS (1.800.522.7287).