

## INTRALATERAL VENTRICULAR CANNULATION

ORDER CODE: IVC

SPECIES: Rat, Mouse, Guinea Pig

DIET SUPPLEMENT: None required

This procedure involves the placement of a cannula into the ventricle of the brain. Such a cannula allows for injection of compound into the brain.

### **Surgical Procedure**

The animal is prepared for surgery using pre-operative and anesthetic procedures as described in our *Surgical Capabilities Reference Paper*, Vol. 13, No.1, 2005. A sagittal skin incision is made on the scalp to expose the skull. The connective tissue on the exposed skull is removed with a sterile cotton tip applicator. The bregma and lambda bone structures are then identified. A pre-cut guide cannula is loaded onto the holder of the stereotaxic apparatus. The tip of the cannula is pointed directly over the bregma, and the zero coordinates are recorded. Then by repositioning the cannula to predetermined coordinates, the tip of the cannula can be placed into the ventricular system. A hole is drilled into the skull to receive the cannula, along with four additional holes for anchoring screw placement. The screws are mounted onto the skull through the four holes. The guide cannula is lowered through the hole into the ventricular system. A layer of cranio-plastic powder is applied around the cannula to affix the cannula and cover the exposed portion of the skull. A small amount of cranio-plastic liquid is applied to the powder. The final step involves inserting and securing a dummy cannula into the guide.

### **IACUC**

Charles River's Institutional Animal Care and Use Committee (IACUC) governs the entire surgical process, including any post-operative holding in CRL facilities prior to shipment. The receiving institution's Animal Care and Use Committee, investigators, and animal care staff are responsible for the well-being of the animal subsequent to its arrival at their institution. Justification for use of surgically-modified animals, review of experimental protocols, authorization to order animals that are surgically modified from Charles River, and all aspects concerning the use of surgically-modified animals after they arrive at the institution are the responsibility of the receiving institution's IACUC.