Preparation of Mouse Brain for Biochemical and Histological Analysis

1. Euthanize mouse and dissect out the brain.

2. Place entire brain on a cold dissecting surface, such as a petri dish filled with ice and covered with wet filter paper. Rinse the brain with cold PBS, then hemisect the brain by cutting in the sagittal plane.

3. Snap freeze one hemisphere in a 1.5 mL tube by lowing it into liquid nitrogen; store at -80ºC for future biochemical analysis.

4. Place the other hemisphere into a 15 mL conical tube containing 10 mL of 10% formalin for fixation. Gently agitate the brain for 2 hours at room temperature.
   - After fixation, wash the brain 5 x 5 min in PBS.

5. Store the brain hemisphere at 4ºC until the tissue can be processed in an automated tissue processor. Following tissue processing, embed the brain in paraffin wax for future sectioning.