Dissection of brain tissue from large animals

Tissues are chopped into segments <0.5cm and snap frozen according to protocol ROSLIN_SOP_Harvest of large animal tissues_20160413.

1. Open cranial cavity and remove brain intact, carefully severing cranial nerves and pituitary stalk.
2. Dissect **olfactory bulbs**, **pineal body** and **optic chiasm** from brain surface.
3. Remove **cerebellum**; section longitudinally to isolate vermis and dissect sample from dorsal surface.
4. Cut cross section of **medulla** at the level of termination of 4th ventricle, and cross section of **pons** at level of cerebellar peduncles.
5. Divide brain longitudinally; from one half collect samples of **corpus callosum** (genu, body, splenium), and dissect thalamus and hypothalamus.
6. From cross sections of other half brain, dissect samples from different areas of **cortex (frontal, parietal, occipital, temporal)**, and dissect **hippocampus**.
7. Collect sample of **dura mater** from anterior cranial cavity.
8. Dissect **pituitary gland** from fossa; divide longitudinally and dissect into anterior (adeno) and posterior (neuro) sections.