Bovine neurologic diagnostic panel work-up

History (neuroanatomical localization and clinical signs are crucial for these cases and will guide diagnostic testing).

Common differential list:

- Bacteria: *Histophilus somni, Listeria monocytogenes*
- Viruses: Rabies, MCF, WNV, BoHV-1
- Protozoal: *Neospora caninum, Sarcocystis* spp.
- Toxicities: Sulfur toxicity, water deprivation/salt toxicity, lead toxicity
- Nutritional: Thiamine deficiency, plants
- Parasites: *Eimeria* spp. (no lesions in brain)

Samples to submit (fresh and fixed)

- ☐ Brain: whole brain fresh
- ☐ Liver
- ☐ Heart
- ☐ Kidney
- ☐ Skeletal muscle
- ☐ Omasum
- ☐ Colon
- ☐ Feces
- ☐ Eye
- ☐ Spinal cord
- ☐ Serum
- ☐ Ruminal contents, complete feed, water
- ☐ Any other gross lesions

Standard tests run at the laboratory (included in the general investigation)

- ☐ Histopathology
- ☐ Aerobic culture
- ☐ Direct fluorescent antibody assay (rabies)

Additional tests (check website for preferred samples and current prices)

- ☐ Trace mineral analysis
- ☐ Case-by-case basis: depending on clinical history and lesions
    - PCR for viral and protozoal organisms