CNS|CRO offers rodent models for a variety of neurological disorders

- **ALS PDC** (Amyotrophic Lateral Sclerosis-Parkinsonism Dementia Complex)
  - Progressive model – motor neuron deficits in initial stages, followed by parkinsonism and cognitive decline

- **Parkinson Disease**
  - Recapitulates all key facets of parkinsonism and PD dementia, including α-synuclein aggregates

- **Epilepsy**
  - Acute and sub-chronic seizure models

- **Schizophrenia**
  - Models and evaluations for positive, negative, and/or cognitive symptoms

- **Stroke**
  - Focal: endothelin-1 (ET-1) microinjection rat model
  - Global: neonatal hypoxia-ischemia and carotid vessel occlusion models

- **Neuropathic Pain**
  - Chronic constriction injury model
  - Spared nerve injury model
  - In-vivo electrophysiology evaluations available

- **Autism Spectrum Disorder**
  - Pharmacological induction model; testing paradigm provides a comprehensive behavioral assessment, including multiple aspects of social-communicative ability

- **High Fat Diet**
  - Metabolic dysregulation model
  - Offspring exhibit some behavioral alterations similar to autism spectrum

- **Fibromyalgia**
  - Acid-saline rat model; evaluations for allodynia, muscle hyperalgesia, and visceral hypersensitivity available

**progressive | predictive | customizable**

**Behavioral testing**

- General activity/exploration
- Anxiety/depression
- Executive function
- Gross/fine motor control
- Neurosensory/neuromotor
- Conditioned place preference/olfactory
- Social behaviors
- Learning & memory assessments

**All tests are adaptable to suit individual needs**
Additional Services

✓ Histology

Neonatal HI Model

Control

Model

Double Labelling: NeuN (neurons; green) & GFAP (glial cells; red)

Control

Model

Merged Image

Timm staining + Cresyl

Somatostatin (DAB)

H&E Staining

Green = Myelin Basic Protein

Red = GFAP

Blue = DAPI

Negative control

Positive control

GSTpi (oligodendrocytes; red) + GFAP (green)

✓ Ultrasonic Vocalizations (USVs)

- assessments of affective state, useful for a variety of disorders (e.g. anxiety, PD, stroke, autism spectrum)

May be used with most behavioural tests

✓ In vivo Electrophysiology

- assessments for peripheral and central nerve conduction, damage, and regeneration.

Especially valuable for pain studies

For more information: info@cnsro.com  |  CNS|CRO  
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