# Data Set Description

**Project Title:**
Behavioral Effects of Magnesium and Vitamin B6 Complex in a Mouse Model of Post-Traumatic Stress Disorder

**Dataset Description:**
This dataset comprises high-resolution video recordings of laboratory mice obtained during a series of standardized behavioral tests. The videos constitute raw, unprocessed experimental data intended for quantitative analysis of locomotor activity, anxiety-related responses, and stress-induced behavioral changes, serving as a primary resource for reproducible behavioral research and neurobiological studies.

**Dataset Structure:**
The dataset archive contains six folders, corresponding to the six experimental cages used in the study. Each folder contains video recordings of the mice housed in that cage.
***Video Filename Coding:*** Each video filename encodes information about the individual animal, with the filename corresponding directly to the animal's unique identification marking.
***Experimental Model*:**

- Species: *Mus musculus*, male C57BL/6J mice
- Groups:
    1. Control (**Cage 1, Cage 2**)
    2. Stress (PTSD-like model induced by inescapable foot-shock) (**Cage 3, Cage 4**)
    3. Stress + Mg-B6 treatment
       The study aims to assess behavioral and biochemical effects of Mg-B6 following stress exposure (**Cage 5, Cage 6**)

**Analysis and Measured Variables**
This behavioral paradigm is used to assess anxiety-related responses and exploratory behavior in rodents. The maze consists of four elevated arms arranged in a cross, with alternating open and closed arms. Behavioral parameters recorded from video include:

- Time spent in open versus closed arms
- Number of entries into each arm
- Locomotor activity and exploratory behavior

Videos from this test can be analyzed using software such as ToxTrac, EthoVision XT, ANY-maze, or manually

**Video Acquisition Parameters:**

- Camera: A4-Tech PK-925H
- Resolution: FullHD 1920 × 1080 px
- Frame rate: 70°
- Format: MP4 (H.264)
- Processing: raw videos, no filtering or editing applied

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