

## **Abstract**

Epilepsy is a serious chronic neurological disorder affecting 0,5 - 1 % of the population in developed countries. The defining feature of epilepsy are epileptic seizures. In human patients, the behavioral manifestations of seizures can be extremely diverse. The milder ones include staring, confusion, or speech difficulties. The more serious manifestations include clonic or tonic convulsions of limbs or the whole body and loss of consciousness. In clinical practice, the seizure manifestations have high diagnostic value since they can be informative of the extent of the brain areas affected by the seizure. Therefore, they are also studied in rodent models of epilepsy. The content of this bachelor thesis is a literature review on the behavioral manifestations of epileptic seizures in rodents and their link to the other modalities used for studying the seizures, such as electrophysiology. Also, similarities between rodent and human seizure manifestations are discussed.

**Keywords:** epilepsy, rodent model, behavioral manifestation, seizure, Racine scale