Schizophrenia is a serious neuropsychiatric disorder with a severe impact on patients' lives. Based on the experiments in animal models and also from the observations of the influence of the drug in humans it was concluded that the decreased activity of N-methyl-D-aspartate (NMDA) receptor gives rise to behaviour that is associated with the clinical manifestation of schizophrenia. Therefore, it is hypothesized that genetically determined variations in NMDA receptor activity contributes to the emergence and development of schizophrenia. The aim of this bachelor thesis is to summarize current knowledge on genetic alternations particularly in the regulatory regions of NMDA receptors in schizophrenia.

Key words: schizophrenia, NMDA receptor, genetic changes