

Involvement of CRH system components in the development of post-traumatic stress disorder

VEGA 2/0010/22

Abstract: Post-traumatic stress disorder (PTSD) is a mental disorder arising from traumatic events that are pathologically manifested by the induction of the fear, hopelessness and scare. The first step in treatment is standard psychotherapy followed by pharmacotherapy (antidepressants/antipsychotics). The neurobiological mechanisms underlying this disease are not well known, but it is thought that pathologically altered functions of several central neurotransmitter and neuropeptide systems may be involved in the etiology of PTSD. The main goal of the project is to determine whether the modulation of the central "stress" CRH system affects the manifestations of the post-traumatic stress response in the animal model of PTSD, i.e. Single prolonged stress (SPS). We will observe how activation of the CRHR2 pathway by a specific agonist or administration of an antipsychotic (aripiprazole) will affect behavior and molecular biological parameters of the CRH system in selected brain regions of SPS exposed animals.

Team members:

IEE BMC SAS	Andrej Tillinger, Ing. PhD - zodpovedný riešiteľ Jana Osacká, RNDr. PhD Alexandre Kiss, RNDr., DrSc
LF UK	Boris Mravec, prof. MUDr. PhD Miroslav Tibeský, MUDr Filip Blaško, Mgr. Zdenko Pirnik, PharmDr, PhD