

Supervisors

- ❖ [Prof. Abdullah ARSLAN](#)
- ❖ [Prof. Osman AÇIKGÖZ](#)
- ❖ [Prof. Cem Şeref BEDİZ](#)
- ❖ [Prof. Sevil GÖNENÇ ARDA](#)
- ❖ [Prof. Muammer KAYATEKİN](#)
- ❖ [Prof. Nazan HARZADIN UYSAL](#)
- ❖ [Assoc.Prof. Ataç SÖNMEZ](#)
- ❖ [Assoc.Prof. Müge KIRAY](#)
- ❖ [Asst.Prof. Mustafa AKHİSAROĞLU](#)
- ❖ [Asst.Prof. Ayfer SELÇUK DAYI](#)

Research Areas

Neuroscience:

- Stress models and effects on brain
- Learning and memory
- Experimental ectrophysiology
- Experimental psychosocial stress and the autonomic nervous system
- Substance abuse studies
- The role of brain-secreted growth factors in different disease models

Exercises Physiology:

- Physical activities and health
- New test development in sports
- Exercise and oxidative stress

Recent Publications

- Dayi A, Agilkaya S, Ozbal S, Cetin F, Aksu I, Gencoglu C, Cingoz S, Pekcetin C, Tugyan K, Kayatekin BM, Uysal N. Maternal aerobic exercise during pregnancy can increase spatial learning by affecting leptin expression on offspring's early and late period in life depending on gender. *ScientificWorldJournal*. 2012;2012:429803. doi: 10.1100/2012/429803. Epub 2012 Sep 16. PMID: 23028249
- Kiray M, Sisman A, Camsari U, Evren M, Dayi A, Baykara B, Aksu I, Ates M, Uysal N. Effects of carbon dioxide exposure on early brain development in rats. *Biotech Histochem*. 2014 Jan 29. PMID: 24476563
- Ates M, Dayi A, Kiray M, Sisman A, Agilkaya S, Aksu I, Baykara B, Buyuk E, Cetinkaya C, Cingoz S, Uysal N. Anxiety- and depression-like behavior are correlated with leptin and leptin receptor expression in prefrontal cortex of streptozotocin-induced diabetic rats. *Biotech Histochem*. 2014 Apr;89(3):161-71. doi: 10.3109/10520295.2013.825319. Epub 2013 Sep 5. PMID: 24007473
- Ozdemir D, Aksu I, Baykara B, Ates M, Sisman AR, Kiray M, Buyuk A, Uysal N. Effects of administration of subtoxic doses of acetaminophen on liver and blood levels of insulin-like growth factor-1 in rats. *Toxicol Ind Health*. 2013 Aug 1. PMID: 23907830
- Cetinkaya C, Sisman AR, Kiray M, Camsari UM, Gencoglu C, Baykara B, Aksu I, Uysal N. Positive effects of aerobic exercise on learning and memory functioning, which correlate with hippocampal IGF-1 increase in adolescent rats. *Neurosci Lett*. 2013 Aug 9;549:177-81. doi:

10.1016/j.neulet.2013.06.012. Epub 2013 Jun 18. PMID: 23792196

- Uysal N, Baykara B, Kiray M, Cetin F, Aksu I, Dayi A, Gurpinar T, Ozdemir D, Arda MN. Combined treatment with progesterone and magnesium sulfate positively affects traumatic brain injury in immature rats. *Turk Neurosurg.* 2013;23(2):129-37. doi: 10.5137/1019-5149.JTN.5582-11.1. PMID: 23546895
- Aksu I, Baykara B, Kiray M, Gurpinar T, Sisman AR, Ekerbicer N, Tas A, Gokdemir-Yazar O, Uysal N. Serum IGF-1 levels correlate negatively to liver damage in diabetic rats. *Biotech Histochem.* 2013 May;88(3-4):194-201. doi: 10.3109/10520295.2012.758311. Epub 2013 Jan 21. PMID: 23331186
- Aksu I, Ates M, Baykara B, Kiray M, Sisman AR, Buyuk E, Baykara B, Cetinkaya C, Gumus H, Uysal N. Anxiety correlates to decreased blood and prefrontal cortex IGF-1 levels in streptozotocin induced diabetes. *Neurosci Lett.* 2012 Dec 7;531(2):176-81. doi: 10.1016/j.neulet.2012.10.045. Epub 2012 Nov 2. PMID: 23123774

• [Ph.D. Programs](#)