



Shayan Amiri

MSc Student

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Shayan Amiri recently joined Dr. Rastegar's Lab as a Master student in the Department of Biochemistry and Medical Genetics. He obtained his BSc in medical laboratory technology from Iran University of Medical Sciences and MSc in Toxicology and Pharmacology from Tehran University of Medical Sciences, Iran.

During Shayan's studies, he was the recipient of the International Graduate Student Entrance Scholarship (IGSES) for 2016. He is also a member of the National Organization for Development of Exceptional Talents (since 2014), the National Elites Foundation (since 2015) and was ranked first in the nationwide entrance exam for the MSc programs in toxicology.

RESEARCH OVERVIEW

Investigating the Genetics and Epigenetics of Neural Stem Cell Differentiation and Brain Development

Shayan's research interest is focused on the genetic and epigenetic regulation of brain development. His research project is focused on the gene expression program of brain-derived neural stem cells. Furthermore, he will study the role of environmental factors and epigenetic mechanisms that lead to impaired brain function and neurodevelopmental disorders. In this regard, his aim is to investigate the role of prenatal alcohol exposure in fetal alcohol spectrum disorders (FASD), by using a combination of stem cell biology techniques and cellular-molecular approaches to uncover the epigenetic basis of FASD.

PUBLICATIONS

Haj-Mirzaian A*, **Amiri S***, Kordjazy N, Rahimi-Balaei M, Haj-Mirzaian A, Marzban H, Aminzadeh A, Dehpour AR, Mehr SE. (2015). *Blockade of NMDA receptors reverses the depressant, but not anxiogenic effect of adolescence social isolation in mice*. Eur J Pharmacol

***Equal first authorship**

Imran Khan M, Shirzadian A, Haj-Mirzaian A, Mehr SE, Dehpour AR, Rahimi-Balaei M, **Amiri S** (2015). *Proconvulsant effect of post-weaning social isolation stress may be associated with dysregulation of opioid system in the male mice*. Med Hypotheses.

Amiri S, Haj-Mirzaian A, Rahimi-Balaei M, Razmi A, Kordjazy N, Shirzadian A, Ejtemaei Mehr S, Sianati H, Dehpour AR (2015). *Co-occurrence of anxiety and depressive-like behaviors following adolescent social isolation in male mice; possible role of nitrenergic system*. Physiol Behav

Kordjazy N, Haj-Mirzaian A, **Amiri S**, Ostadhadi S, Kordjazy M, Sharifzadeh M, Dehpour AR (2015). *Elevated level of nitric oxide mediates the anti-depressant effect of rubidium chloride in mice*. Eur J Pharmacol

Haj-Mirzaian A, Kordjazy N, Haj-Mirzaian A, Ostadhadi S, Ghasemi M, **Amiri S**, Faizi M, Dehpour A (2015). *Evidence for the involvement of NMDA receptors in the antidepressant-like effect of nicotine in mouse forced swimming and tail suspension tests*. Psychopharmacology

Kordjazy N, Haj-Mirzaian A, **Amiri S**, Ostadhadi S, Amini-Khoei H, Dehpour AR (2015). *Involvement of N-methyl-d-aspartate receptors in the antidepressant-like effect of 5-hydroxytryptamine 3 antagonists in mouse forced swimming test and tail suspension test.* Pharmacol Biochem Behav

Amini-Khoei H*, **Amiri S***, Shirzadian A, Haj-Mirzaian A, Alijanpour S, Rahimi-Balaei M, Mohammadi- A, Hassanipour M, Mehr SE, Dehpour AR (2015). *Experiencing neonatal maternal separation the seizure threshold in adult male mice: Involvement of the opioid system.* Epilepsy Behav

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Hassanipour M, Shirzadian A, Boojar MM, Abkhoo A, Abkhoo A, Delazar S, **Amiri S**, Rahimi N, Ostadhadi S, Dehpour A (2015). *Possible involvement of nitrenergic and opioidergic systems in the modulatory effect of acute chloroquine treatment on pentylenetetrazol induced convulsions in mice.* Brain Res Bull

Amini-Khoei H, Rahimi-Balaei M, **Amiri S**, Haj-Mirzaian A, Hassanipour M, Shirzadian A, Gooshe M, Alijanpour S, Mehr SE, Dehpour AR (2015). *Morphine modulates the effects of histamine H1 and H3 receptors on seizure susceptibility in pentylenetetrazole-induced seizure model of mice.* Eur J Pharmacol

Amiri S, Amini-Khoei H, Haj-Mirzaian A, Rahimi-Balaei M, Naserzadeh P, Dehpour AR, Mehr SE, Hosseini MJ (2015). *Tropisetron attenuated the anxiogenic effects of social isolation by modulating nitrenergic system and mitochondrial function.* Biochim Biophys Acta

Peeri M, **Amiri S** (2015). *Protective effects of exercise in metabolic disorders are mediated by inhibition of mitochondrial-derived sterile inflammation.* Med Hypotheses

Haj-Mirzaian A*, **Amiri S***, Kordjazy N, Momeny M, Razmi A, Rahimi-Balaei M, Amini-Khoei H, Haj- Mirzaian A, Marzban H, Mehr SE, Ghaffari SH, Dehpour AR (2015). *Lithium attenuated the depressant and anxiogenic effect of juvenile social stress through mitigating the negative impact of interleukin-1 β and nitric oxide on hypothalamic-pituitary-adrenal axis function.* Neuroscience

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Amiri S, Shirzadian A, Haj-Mirzaian A, Imran-Khan M, Rahimi Balaei M, Kordjazy N, Dehpour AR, Mehr SE (2014). *Involvement of the nitrenergic system in the proconvulsant effect of social isolation stress in male mice.* Epilepsy Behav