

Prof. Yaghoub Fathollahi
Dept. of Medical Physiology,
Faculty of Medical Sciences,
Tarbiat Modares University,
Theran, I.R. Iran

Education:

Undergraduate School: BSc in Biology

Graduate School: MSc in Medical Physiology, TMU, Tehran, I.R. Iran.

Doctoral Degree: Ph.D. in Medical Physiology, TMU, Tehran, I.R. Iran.

Post-doctoral training: Fourth IBRO postdoctoral training workshop in Basic Neuroscience, Hong Kong.

Research Interest: Neural Network Physiology, Synaptic Plasticity and Meta-Plasticity

Awards:

The Seventh Razi Research Festival on Medical Sciences,

Research and Education Awards at TMU,

Prof. F. Motamedi's Scientific Award.

Scientific Performance at the International Level:

	WOS	SCOPUS	Google Scholar
ID	C-1670-2010	6701492650	
Publication Counts	150	143	174
H-index	29	29	35
Citations	2500	2550	3670

Recent Publications:

Gholami M, Shojaei A, Tavassoli Z, MirNajafi-Zadeh J, **Fathollahi Y**. [Theta rhythm stimulation patterns can reverse aberrant hippocampal CA1 synaptic plasticity under challenging conditions: Involvement of extracellular adenosine](#). *Brain Res Bull*. 2025 Nov 25; 233: 111658. doi: 10.1016/j.brainresbull.2025.111658. Online ahead of print. PMID: 41308757.

Ghamkharinejad G, Mottarlini F, Tavassoli Z, Caffino L, Fumagalli F, Homberg JR, **Fathollahi Y**. [Habituation to novel stimuli alters hippocampal plasticity associated with morphine tolerance in male Wistar rats](#). *Brain Res*. 2025 Apr 15; 1853: 149508. doi: 10.1016/j.brainres.2025.149508. Epub 2025 Feb 13. PMID: 39954800.

Alami K, **Fathollahi Y**, Hashemizadeh S, Mosleh M, Semnanian S, Mousavi SY, Azizi H. [Microglia-dependent peripheral neuropathic pain in adulthood following adolescent exposure to morphine in male rats](#). *Neuropharmacology*. 2025 Feb 1; 263: 110211. doi: 10.1016/j.neuropharm.2024.110211. Epub 2024 Nov 8. PMID: 39521039.

Rezagholizadeh A, Shojaei A, Hosseinmardi N, Mirnajafi-Zadeh J, Kohlmeier KA, **Fathollahi Y**. [Astrocytes contribute to the functional differentiation of the hippocampal longitudinal axis during reward and aversion processing in the adult male rat](#). *Neuroscience*. 2024 Nov 12; 560: 297-313. doi: 10.1016/j.neuroscience.2024.10.011. Epub 2024 Oct 5. PMID: 39374644.

Anvari S, Javan M, Mirnajafi-Zadeh J, **Fathollahi Y**. [Repeated Morphine Exposure Alters Temporoammonic-CA1 Synaptic Plasticity in Male Rat Hippocampus](#). *Neuroscience*. 2024; 545: 148-157. doi: 10.1016/j.neuroscience.2024.03.015. PMID: 38513764.

Nejad GG, Mottarlini F, Tavassoli Z, Caffino L, Fumagalli F, Homberg JR, **Fathollahi Y**. [Conditioned morphine tolerance promotes neurogenesis, dendritic remodelling and pro-plasticity molecules in the adult rat hippocampus](#). *Addict Biol*. 29 (3): e13377. doi: 10.1111/adb.13377. PMID: 38506630.

Ahmadi M, Rouhi N, **Fathollahi Y**, Shojaei A, Rezaei M, Rostami S, Saab BJ, Mirnajafi-Zadeh J. [A Dual Effect of Dopamine on Hippocampal LTP and Cognitive Functions in Control and Kindled Mice](#). *J Neurosci*. 2024; 44 (5):e0926212023. doi: 10.1523/JNEUROSCI.0926-21.2023. PMID: 38124004.

Mohammadi M, Tavassoli Z, Anvari S, Javan M, **Fathollahi Y**. [Avoidance and escape conditioning adjust adult neurogenesis to conserve a fit hippocampus in adult male rodents](#). *J Neurosci Res*. 2024; 102 (1):e25291. doi: 10.1002/jnr.25291. PMID: 38284841

Mosleh M, Javan M, **Fathollahi Y**. [The properties of long-term potentiation at SC-CA1/ TA-CA1 hippocampal synaptic pathways depends upon their input pathway activation patterns](#). *IBRO Neurosci Rep*. 2023;14: 358-365. doi: 10.1016/j.ibneur.2023.03.013. eCollection 2023 Jun. PMID: 37020855

Tavassoli Z, Javan M, Hosseinmardi N, **Fathollahi Y**. [Electrical impulses evoked activity patterns in ventral tegmental area and locus coeruleus modulate endogenous and learning-dependent disparity of cell proliferation along the mouse dentate gyrus](#).

IBRO Neurosci Rep. 2023; 14: 293-307. doi: 10.1016/j.ibneur.2023.03.002. eCollection 2023
Jun. PMID: 37388501