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Information

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Education

• Marie Skłodowska-Curie Ph.D., Neuroscience, 2020-2024, University of Padova

(Supervisor: Professor. Maurizio Corbetta)

- M.Sc., Biomedical Engineering, 2012-2015, Tehran University of Medical Science
- B.Sc., Electronic Engineering, 2007-2012, University of Tehran

Research

Interests

My fields of interest falls in the area of image acquisition and analysis for Magnetic Resonance Imaging (MRI) in Medicine. More specifically, the analysis of Diffusion MRI which can be used to investigate the microstructural organization in the human brain, tractography Human Brain Connectome.

Work

Experience

- 2020-Present PhD Researcher, Padova Neuroscience Center (PNC)
- 2013-2019 Senior Researcher, Students' Scientific Research Center,
 Tehran University of Medical Sciences

I founded the junior research group at the Student Scientific Research Center, Tehran University of Medical Sciences (TUMS) in 2013. As the director of this junior research group my job included a voluntary, part-time student research activity based in SSRC, TUMS and does not include employment or any financial benefits.

• 2015-2016 **Researcher**, Basir Eye Health Research Center

Web Page

- Google Scholar (Hindex: 16)
- Researchgate
- https://pnc.unipd.it/phd-students/

Publications (Published)(* Correspond Author, ¹ Co-first Author)

- 1. Seyedmirzaei H, Shafie M, Kargar A, Golbahari A, Bijarchian M, Ahmadi S, et al. White matter tracts associated with alexithymia and emotion regulation: A diffusion MRI study. Journal of Affective Disorders. 2022;314:271-80. doi: https://doi.org/10.1016/j.jad.2022.07.039.
- 2. Rahimi R, Dolatshahi M, Abbasi-Feijani F, Momtazmanesh S, Cattarinussi G, Aarabi MH, et al. Microstructural white matter alterations associated with migraine headaches: a systematic review of diffusion tensor imaging studies. Brain Imaging and Behavior. 2022. doi: 10.1007/s11682-022-00690-1.
- 3. Haghshomar M, Shobeiri P, Seyedi SA, Abbasi-Feijani F, Poopak A, Sotoudeh H, et al. Cerebellar Microstructural Abnormalities in Parkinson's Disease: a Systematic Review of Diffusion Tensor Imaging Studies. The Cerebellum. 2022;21(4):545-71. doi: 10.1007/s12311-021-01355-3.

- 4. Cattarinussi G, Aarabi MH¹, Sanjari Moghaddam H, Homayoun M, Ashrafi M, Soltanian-Zadeh H, et al. Effect of parental depressive symptoms on offspring's brain structure and function: A systematic review of neuroimaging studies. Neuroscience & Biobehavioral Reviews. 2021;131:451-65. doi: https://doi.org/10.1016/j.neubiorev.2021.09.046.
- Dolatshahi M, Ashraf-Ganjouei A, Wu IW, Zhang Y, Aarabi MH, Tosun D. White matter changes in drug-naïve Parkinson's disease patients with impulse control & probable REM sleep behavior disorders. Journal of the Neurological Sciences. 2021;430:120032. doi: https://doi.org/10.1016/j.jns.2021.120032.
- Sanjari Moghaddam H, Sanjari Moghaddam A, Hasanzadeh A, Sanatian Z, Mafi A, Aarabi MH*, et al. A systematic review of resting-state and task-based fmri in juvenile myoclonic epilepsy. Brain Imaging and Behavior. 2021. doi: 10.1007/s11682-021-00595-5.
- 7. Farshbafnadi M, Kamali Zonouzi S, Sabahi M, Dolatshahi M, **Aarabi MH**. Aging & COVID-19 susceptibility, disease severity, and clinical outcomes: The role of entangled risk factors. Experimental Gerontology. 2021;154:111507. doi: https://doi.org/10.1016/j.exger.2021.111507.
- 8. Momtazmanesh S, **Aarabi MH**, Sanjari Moghaddam H, Delavari F, Shafie M, Abbasi-Feijani F, et al. Brain microstructural abnormalities in 22q11.2 deletion syndrome: A systematic review of diffusion tensor imaging studies. European Neuropsychopharmacology. 2021;52:96-135. doi: https://doi.org/10.1016/j.euroneuro.2021.07.004.
- 9. Sanjari Moghaddam H, Mobarak Abadi M, Dolatshahi M, Bayani Ershadi S, Abbasi-Feijani F, Rezaei S, Cattarinussi G, **Aarabi MH***. Effects of Prenatal Methamphetamine Exposure on the Developing Human Brain: A Systematic Review of Neuroimaging Studies. ACS Chemical Neuroscience 2021.
- Milham M, Petkov C, Belin P, Ben Hamed S, Evrard H, Fair D, et al. Toward next-generation primate neuroscience: A collaboration-based strategic plan for integrative neuroimaging. Neuron. 2021. doi: https://doi.org/10.1016/j.neuron.2021.10.015.
- 11. Mehrabinejad M-M, Rafei P, Sanjari Moghaddam H, Sinaeifar Z, **Aarabi MH***. Sex Differences are Reflected in Microstructural White Matter Alterations of Musical Sophistication: A Diffusion MRI Study. Frontiers in Neuroscience. 2021;15(908). doi: 10.3389/fnins.2021.622053.

- 12. Dolatshahi M, Sabahi M, Aarabi MH. Pathophysiological Clues to How the Emergent SARS-CoV-2 Can Potentially Increase the Susceptibility to Neurodegeneration. Molecular Neurobiology. 2021. doi: 10.1007/s12035-020-02236-2.
- 13. Ashraf-ganjouei A, Moradi K, Aarabi MH, Abdolalizadeh A, Kazemi SZ, Kasaeian A, et al. The Association Between REM Sleep Behavior Disorder and Autonomic Dysfunction in Parkinson's Disease. Journal of Parkinson's Disease. 2021;Preprint:1-9. doi: 10.3233/JPD-202134.
- 14. Mehrabinejad M-M, Sanjari Moghaddam H, Mohammadi E, Hajighadery A, Sinaeifar Z, Aarabi MH*.
 Sex differences in microstructural white matter alterations of mathematics anxiety based on diffusion
 MRI connectometry. Neuropsychology. 2021;35(2):197-206. doi: 10.1037/neu0000684.
- 15. Moghaddam HS, Mohammadi E, Dolatshahi M, Mohebi F, Ashrafi A, Khazaie H, Aarabi MH* (2020) White matter microstructural abnormalities in primary insomnia: A systematic review of diffusion tensor imaging studies. Progress in Neuro-Psychopharmacology and Biological Psychiatry:110132. doi:https://doi.org/10.1016/j.pnpbp.2020.110132

- 16. Rahmani F, Sanjari Moghaddam H, **Aarabi MH*** (2020) Intact microstructure of the right corticostriatal pathway predicts creative ability in healthy adults. Brain and Behavior:e01895. doi:10.1002/brb3.1895
- 17. Mohammadi S, Moosaie F, Aarabi MH* (2020) Understanding the Immunologic Characteristics of Neurologic Manifestations of SARS-CoV-2 and Potential Immunological Mechanisms. Molecular Neurobiology. doi:10.1007/s12035-020-02094-y
- 18. Sanjari Moghaddam H, Mehrabinejad M-M, Mohebi F, Hajighadery A, Maroufi SF, Rahimi R, Aarabi MH* (2020) Microstructural white matter alterations and personality traits: A diffusion MRI study. Journal of Research in Personality 88:104010. doi:https://doi.org/10.1016/j.jrp.2020.104010
- Moghaddam HS, Aarabi MH, Mehvari-Habibabadi J, Sharifpour R, Mohajer B, Mohammadi-Mobarakeh N, Hashemi-Fesharaki SS, Elisevich K, Nazem-Zadeh M-R (2020) Distinct patterns of hippocampal subfield volume loss in left and right mesial temporal lobe epilepsy. Neurological Sciences. doi:10.1007/s10072-020-04653-6

- 20. Sanjari Moghaddam H, Dolatshahi M, Mohebi F, Aarabi MH* (2020) Structural white matter alterations as compensatory mechanisms in Parkinson's disease: A systematic review of diffusion tensor imaging studies. Journal of Neuroscience Research 98 (7):1398-1416. doi:10.1002/jnr.24617
- Ashraf-ganjouei A, Moradi K, Bagheri S, Aarabi MH (2020) The association between systemic inflammation and cognitive performance in healthy adults. Journal of Neuroimmunology 345:577272. doi:https://doi.org/10.1016/j.jneuroim.2020.577272
- 22. Rahmani F, Sanjari Moghaddam H, Rahmani M, **Aarabi MH*** (2020) Metabolic connectivity in Alzheimer's diseases. Clinical and Translational Imaging 8 (3):157-166. doi:10.1007/s40336-020-00371-3

- 23. Sanjari Moghadam H, Ghazi Sherbaf F, Aarabi MH* (2019) Brain Microstructural Abnormalities in Type 2 Diabetes Mellitus: A Systematic Review of Diffusion Tensor Imaging Studies. Frontiers in Neuroendocrinology:100782. doi:https://doi.org/10.1016/j.yfrne.2019.100782
- 24. Rahmani F, Sanjari Moghaddam H, **Aarabi MH*** (2019) Microstructural changes and internet addiction behaviour: A preliminary diffusion MRI study. Addictive Behaviors 98:106039. doi:https://doi.org/10.1016/j.addbeh.2019.106039
- 25. Mohajer B, Masoudi M, Ashrafi A, Mohammadi E, Bayani Ershadi AS, **Aarabi MH***, Uban KA (2019) Structural white matter alterations in male adults with high functioning autism spectrum disorder and concurrent depressive symptoms; a diffusion tensor imaging study. Journal of Affective Disorders 259:40-46. doi:https://doi.org/10.1016/j.jad.2019.08.010
- 26. Ashraf-Ganjouei A, Kheiri G, Masoudi M, Mohajer B, Mojtahed Zadeh M, Saberi P, Shirin Shandiz M, Aarabi MH* (2019) White Matter Tract Alterations in Drug-naïve Parkinson's Disease Patients with Excessive Daytime Sleepiness. Frontiers in neurology 10:378, doi: 10.3389/fneur.2019.00378
- 27. Ashraf-Ganjouei A, Rahmani F, **Aarabi MH**¹, Moghaddam HS, Nazem-Zadeh M-R, Davoodi-Bojd E, Soltanian-Zadeh H (2019) White matter correlates of disease duration in patients with temporal lobe epilepsy: updated review of literature. Neurological Sciences. doi: 10.1007/s10072-019-03818-2
- 28. Sobhani, S., Rahmani, F., **Aarabi, M. H.**¹, & Sadr, A. V. (2019). Exploring white matter microstructure and olfaction dysfunction in early parkinson disease: diffusion MRI reveals new insight. Brain Imaging and Behavior. doi: 10.1007/s11682-017-9781-0

- 29. Haghshomar, M., Rahmani, F., Hadi Aarabi, M¹., Shahjouei, S., Sobhani, S., & Rahmani, M. (2019). White Matter Changes Correlates of Peripheral Neuroinflammation in Patients with Parkinson's Disease. Neuroscience. doi: 10.1016/j.neuroscience.2017.10.050
- 30. Ghazi Sherbaf, F., Mojtahed Zadeh, M., Haghshomar, M., & **Aarabi, M. H*.** (2019). Posterior limb of the internal capsule predicts poor quality of life in patients with Parkinson's disease: connectometry approach. Acta Neurol Belg. doi: 10.1007/s13760-018-0910-3
- 31. Sanjari Moghaddam H, Rahmani F, **Aarabi MH**¹, Nazem-Zadeh M-R, Davoodi-Bojd E, Soltanian-Zadeh H (2019) White matter microstructural differences between right and left mesial temporal lobe epilepsy. Acta neurologica Belgica. doi:10.1007/s13760-019-01074-x
- 32. Ansari, M., Adib Moradi, S., Ghazi Sherbaf, F., Hedayatnia, A., & **Aarabi, M. H***. (2019). Comparison of structural connectivity in Parkinson's disease with depressive symptoms versus non-depressed: a diffusion MRI connectometry study. Int Psychogeriatr, 1-8. doi: 10.1017/s1041610218000170
- 33. Sanjari Moghaddam H, Dolatshahi M, Salardini E, **Aarabi MH*** (2019) Association of olfaction dysfunction with brain microstructure in prodromal Parkinson disease. Neurological Sciences. doi:10.1007/s10072-018-3629-2
- 34. Ghazi Sherbaf F, **Aarabi MH***, Hosein Yazdi M, Haghshomar M (2019) White matter microstructure in fetal alcohol spectrum disorders: A systematic review of diffusion tensor imaging studies. Human brain mapping 40 (3), 1017-1036. doi:doi:10.1002/hbm.24409

- 35. Mayeli, M., Rahmani, F., & **Aarabi, M. H*.** (2018). Comprehensive Investigation of White Matter Tracts in Professional Chess Players and Relation to Expertise: Region of Interest and DMRI Connectometry. Frontiers in Neuroscience, 12(288). doi: 10.3389/fnins.2018.00288
- 36. Ghazi Sherbaf, F., Rahmani, F., Jooyandeh, S. M., & **Aarabi, M. H*.** (2018). Microstructural changes in patients with Parkinson disease and REM sleep behavior disorder: depressive symptoms versus non-depressed. Acta Neurol Belg. doi: 10.1007/s13760-018-0896-x,
- 37. Mojtahed Zadeh, M., Ashraf-Ganjouei, A., Ghazi Sherbaf, F., Haghshomar, M., & **Aarabi, M. H.*** (2018). White Matter Tract Alterations in Drug-Naive Parkinson's Disease Patients With Impulse Control Disorders. Front Neurol, 9, 163. doi: 10.3389/fneur.2018.00163

- 38. Ghazi Sherbaf, F., Same, K., Ashraf-Ganjouei, A., & **Aarabi, M. H.*** (2018). Altered white matter microstructure associated with mild and moderate depressive symptoms in young adults, a diffusion tensor imaging study. Neuroreport, 29(8), 685-689. doi: 10.1097/wnr.0000000000001017
- 39. Sanjari Moghaddam, H., Ghazi Sherbaf, F., Mojtahed Zadeh, M., Ashraf-Ganjouei, A., & Aarabi, M. H*. (2018). Association Between Peripheral Inflammation and DATSCAN Data of the Striatal Nuclei in Different Motor Subtypes of Parkinson Disease. Front Neurol, 9, 234. doi: 10.3389/fneur.2018.00234
- 40. Moghaddam, H. S., & **Aarabi, M. H.** (2018). Synaptotagmin-11 Is a novel hotspot in the pathogenesis of parkin-linked Parkinson's disease: New implications for clinical targeting. Movement Disorders, 33(4), 582-582. doi: doi:10.1002/mds.27369
- 41. Ghazi Sherbaf, F., Rostam Abadi, Y., Mojtahed Zadeh, M., Ashraf-Ganjouei, A., Sanjari Moghaddam, H., & Aarabi, M. H.* (2018). Microstructural Changes in Patients With Parkinson's Disease Comorbid With REM Sleep Behaviour Disorder and Depressive Symptoms. Front Neurol, 9, 441. doi: 10.3389/fneur.2018.00441
- 42. Sanjari Moghaddam, H., Valitabar, Z., Ashraf-Ganjouei, A., Mojtahed Zadeh, M., Ghazi Sherbaf, F., & Aarabi, M. H.* (2018). Cerebrospinal Fluid C-Reactive Protein in Parkinson's Disease: Associations with Motor and Non-motor Symptoms. NeuroMolecular Medicine. doi: 10.1007/s12017-018-8499-5
- 43. Ghazi Sherbaf, F., Same, K., & **Aarabi, M. H.*** (2018). High angular resolution diffusion imaging correlates of depression in Parkinson's disease: a connectometry study. Acta Neurol Belg. doi: 10.1007/s13760-018-0937-5
- 44. Sanjari Moghaddam, H., & Aarabi, M. H. (2018). Aβ-Mediated Dysregulation of F-Actin Nanoarchitecture Leads to Loss of Dendritic Spines and Alzheimer's Disease-Related Cognitive Impairments. The Journal of Neuroscience, 38(26), 5840-5842. doi: 10.1523/jneurosci.0844-18.2018
- 45. Dolatshahi, M., Pourmirbabaei, S., Kamalian, A., Ashraf-Ganjouei, A., Yaseri, M., & Aarabi, M. H.*
 (2018). Longitudinal Alterations of Alpha-Synuclein, Amyloid Beta, Total, and Phosphorylated Tau in
 Cerebrospinal Fluid and Correlations Between Their Changes in Parkinson's Disease. Front Neurol, 9, 560.
 doi: 10.3389/fneur.2018.00560

- 46. Ashraf-Ganjouei A, Majd A, Javinani A, **Aarabi MH*** (2018) Autonomic dysfunction and white matter microstructural changes in drug-naïve patients with Parkinson's disease. PeerJ 6:e5539. doi:10.7717/peerj.5539
- 47. Ghazi Sherbaf F, Mohajer B, Ashraf-Ganjouei A, Mojtahed Zadeh M, Javinani A, Sanjari Moghaddam H, Shirin Shandiz M, **Aarabi MH*** (2018) Serum Insulin-Like Growth Factor-1 in Parkinson's Disease; Study of Cerebrospinal Fluid Biomarkers and White Matter Microstructure. Frontiers in Endocrinology 9 (608). doi:10.3389/fendo.2018.00608
- 48. Sanjari Moghaddam H, **Aarabi MH*** (2018) Wild-type LRRK2 as a new potential therapeutic target in idiopathic Parkinson's disease. Movement Disorders . doi:10.1002/mds.27509
- 49. Haghshomar, M., Dolatshahi, M., Ghazi Sherbaf, F., Sanjari Moghaddam, H., Shirin Shandiz, M., & Aarabi, M. H.* (2018). Disruption of Inferior Longitudinal Fasciculus Microstructure in Parkinson's Disease: A Systematic Review of Diffusion Tensor Imaging Studies. Front Neurol, 9(598). doi: 10.3389/fneur.2018.00598

- 50. Same K, Ghazi Sherbaf F, Aarabi MH (2017) New link between Parkinson's and Alzheimer's: Research uncovers the role of mutant leucine rich repeat kinase 2 and amyloid precursor protein. Movement Disorders 32 (10):1378-1379. doi:10.1002/mds.27170
- 51. Rahmani, F., & **Aarabi, M. H.*** (2017). Does apolipoprotein A1 predict microstructural changes in subgenual cingulum in early Parkinson? Journal of Neurology, 264(4), 684-693. doi: 10.1007/s00415-017-8403-5
- 52. Ansari, M., Rahmani, F., Dolatshahi, M., Pooyan, A., & **Aarabi, M. H.** (2017). Brain pathway differences between Parkinson's disease patients with and without REM sleep behavior disorder. Sleep and Breathing, 21(1), 155-161. doi: 10.1007/s11325-016-1435-8
- 53. Rahmani, F., Kamalian, A., & Aarabi, M. H. (2017). New evidence comes to light: How is α-synuclein aggregation related to mitochondrial protein import in Parkinson's disease? Movement Disorders, 32(1), 107-107. doi: doi:10.1002/mds.26889

Publications (Submitted)

- 1. Graph Theoretical Approach to Brain Remodeling in Multiple Sclerosis(Accepted)
- 2. Deep Learning Methods for Segmentation of White Matter Fiber Tracts: Review of State-of-the-Art and Future Prospective
- 3. Sex differences in Earworms based on Diffusion MRI
- 4. Microstructural White Matter Alterations in Media Multitasking; a Gender-based Diffusion Magnetic Resonance Imaging Study
- 5. Central Nervous System Microstructural Alterations in Type 1 Diabetes Mellitus: A Systematic Review of Diffusion Tensor Imaging Studies
- 6. White matter alterations corresponding to behavioral activation and inhibition
- 7. Trait anger representation in microstructural white matter tracts: a Diffusion MRI study (**Revised**)
- 8. Investigating the white matter tract pattern in ADHD compared to healthy controls
- 9. White matter tracts alterations underpinning reward and conflict processing
- 10. Sys Review in NODDI and MS
- 11. Cerebellar pathways in MS
- 12. Lesion Net Mapping

Chapter Book

- Mahsa Dolatshahi, Farzaneh Rahmani, Timm Poepl, Thomas C. Baghai, Somayeh Mohammadi Jooyandeh and Mohammad Hadi Aarabi, Working Memory Deficit in Recent-onset Schizophrenia Associated with White Matter: Connectometry Approach, Computational Diffusion MRI
- Farzaneh Rahmani and Mohammad Hadi Aarabi, Accurate Diagnosis of SWEDD vs. Parkinson Using Microstructural Changes of Cingulum Bundle: Trackspecific Analysis, Computational Diffusion MRI(Accepted) (correspond)
- 3) AF Kazerooni, MH A'arabi and HS Rad. Generation of MR-based Attenuation Correction Map of PET Images in the Brain Employing Joint Segmentation of Skull and Soft-Tissue from Single Short-TE MR Imaging Modality, Computational Methods for Molecular Imaging, 139-147
- 4) MH Aarabi, HS Rad .Diffusion-Map: A Novel Visualizing Biomarker for Diffusion Tensor Imaging of Human Brain White Matter, Computational Diffusion MRI, 65-77

Conference Proceeding

- 1) Somayeh Mohyammadi Jooyandeh, Aida Kamalian,Sepideh Shiranvand,Mahsa Dolatshahi, Mohammad Hadi Shadmehr, Thomas C. Baghai,Farzaneh Rahmani,Ahmad Shojaie,Mohammad H. Aarabi Evaluation of the Areas Involved in Visual Cortex in Parkinson's Disease Using Diffusion Tensor Imaging, Proceedings of the Ophthalmic Medical Image Analysis Third International Workshop (OMIA 2016) (correspond)
- 2) Ali Anjomshoa, Mahsa Dolatshahi, Fatemeh Amirkhani, Farzaneh Rahmani, Mehdi Mirbagheri and Mohammad Hadi Aarabi*, Structural Brain Network Analysis in Schizophrenia Using Minimum Spanning Tree, 38th Annual International Conference of the IEEE Engineering in Medicine and Biology Society(correspond)
- 3) Farzaneh Rahmani, Mina Ansari, Atefeh Pooyan, Mehdi Mirbagheri and Mohammad Hadi Aarabi*, Brain Pathway Differences between Parkinson Patients with or without REM Sleep Disorder, 38th Annual International Conference of the IEEE Engineering in Medicine and Biology(correspond)
- 4) Mohammad Hadi Aarabi*, Aida Kamalian, Bahram Mohajer, Mahdi Shirin Shandiz, Ahmad Shojaie, Hamidreza Safabakhsh, A Statistical Approach in Human Brain Connectome of Parkinson Disease in Elderly People Using Network Based Statistics, 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society.
- 5) MH Aarabi, N Salehi, AF Kazerooni and HS Rad. A High Throughput and Efficient Visualization Method for Diffusion Tensor Imaging of Human Brain Employing Diffusion-Map Space, 36th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC'14), Chicago, Illinois, USA.

Abstract

Presentation

- 1. Nazanin Hosseini, Bahar Pourmennati, Farzaneh Rahmani, Aida Kamalian, Ali Anjomshoa, Mahsa Dolatshahi, Mohammad Hadi Aarabi; Limbic system and olfactory dysfunction in drug naive patients with Parkinson's disease: a connectometry study, Society for Neuroscience 2016, San Diego
- 2. Ali Anjomshoa, Mahsa Dolatshahi, Aida Kamalian, Farzaneh Rahmani, Nazanin Hosseini, Mohammad Hadi Aarabi; The effects of late bilingualism on the white matter of the brain, connectometry approach, Society for Neuroscience 2016, San Diego
- 3. Mahsa Dolatshahi, Ali Anjomshoa, Aida Kamalian, Farzaneh Rahmani, Nazanin Hosseini, Mohammad Hadi Aarabi; How can the time passed from immersion in bilingualism affect the white matter integrity of fiber tracts in brain? Connectometry approach; Society for Neuroscience 2016, San Diego
- 4. Aida Kamalian, Farzaneh Rahmani, Mahsa Dolatshahi, Ali Anjomshoa, Nazanin Hosseini, Mohammad Hadi Aarabi; An exploratory whole-brain cohort study of structural connectivity of Parkinson disease progression; Society for Neuroscience 2016, San Diego
- Farzaneh Rahmani, Aida Kamalian, Nazanin Hosseini, Mahsa Dolatshahi, Ali Anjomshoa, Mohammad Hadi Aarabi; Whole plasma associates with brain structural changes in early Parkinson disease: a DTI study; Society for Neuroscience 2016, San Diego
- 6. Farzaneh Rahmani, Mohammad Hadi Aarabi, Maani Beigy, Does Apolipoprotein A1 Predict Microstructural Changes in Subgenual Cingulum in Early Parkinson?, 22th Annual Meeting of the Organization for Human Brain Mapping (OHBM 2016), Geneva, Switzerland.
- 7. Mahsa Dolatshahi, Ali Anjomshoa, fatemeh amirkhani, Farzaneh Rahmani, Ahmad Shojaei, Hamidreza Safabakhsh, Mohammad Hadi Aarabi, Working memory deficit in recent-onset SZ associated with WM integrity: connectometry approach, 22th Annual Meeting of the Organization for Human Brain Mapping (OHBM 2016), Geneva, Switzerland.
- 8. Ali Anjomshoa, Mahsa Dolatshahi, fatemeh amirkhani, Ahmad Shojaei, Hamidreza Safabakhsh, Mohammad Hadi Aarabi, Structural Brain Connectivity in Schizophrenia: Classical Network Analysis vs Minimum Spanning Tree, 22th Annual Meeting of the Organization for Human Brain Mapping (OHBM 2016), Geneva, Switzerland.
- Sasan Bayani, AmirHussain Abdolalizadeh, Nooshin Abbasi, Bahram Mohajer, Mohammad Hadi Aarabi, MAPT gene polymorphism is associated with abnormal uncinated fasciculus integrity in normal population, Society for Neuroscience 2015, Chicago
- 10. Bahram Mohajer, Nooshin Abbasi, AmirHussian Abdolalizadeh, Mohammad Hadi Aarabi, Rs17518584 polymorphism in CADM2 gene accelerates brain and hippocampal atrophy in Alzheimer's disease and Mild Cognitive Impaired patients, Society for Neuroscience Neuroscience 2015, Chicago

- 11) Ehsan Eqlimi, Mahsa Alizadeh Shalchy, Elahe Karami, Ahmad Shojaei, Mohammad Hadi Aarabi, Hamidreza Safabakhsh, Nader Riyahi Alam, Modular Organization of Resting State Functional Networks in Patients with Multiple Sclerosis, 37th Annual International Conference of the IEEE Engineering in Medicine and Biology Society.
- 12) Aida Kamalian, Mohammad Hadi Aarabi. Alternations of human brain connectome in Parkinson's disease using network based statistics (NBS) [abstract]. Movement Disorders 2015;30 Suppl 1:29
- 13) MH Aarabi, S adebileje, MS Shandiz and HS Rad. A New Approach for Visualization of Dynamic PET Images Employing Diffusion-Map Space, MICCAI 2014 workshop on Computational Methods for Molecular Imaging (CMMI), Harvard, Boston, MA, USA.
- 14) AF Kazerooni, MH Aarabi and HS Rad. Generation of MR-based Attenuation Correction Map of PET Images in the Brain Employing Joint Segmentation of Skull and Soft-Tissue from Single Short-TE MR Imaging Modality, MICCAI 2014 workshop on Computational Methods for Molecular Imaging (CMMI), Harvard, Boston, MA, USA.
- 15) MH A'arabi, AF Kazerooni and HS Rad. Diffusion-Map: A Novel Visualizing Biomarker for Diffusion Tensor Imaging of Human Brain White Matter, MICCAI 2014 workshop on Computational Diffusion MRI (CDMRI14), MIT, Boston, MA,USA.
- 16) MH A'arabi, AF Kazerooni, N Mohammadi and HS Rad. Efficiency of Diffusion Tensor Imaging in the Estimation of Brain Connectivity; A Simulation Study, 4th Biennial Conference on Resting State / Brain Connectivity, MIT, Cambridge, MA, USA.
- 17) MH A'arabi, AF Kazerooni, P Khateri, MR Ay and HS Rad. A Robust MR-Based Attenuation Map Generation in Short-TE MR Images of the Head Employing Hybrid Spatial Fuzzy C-Means Clustering and Intensity Inhomogeneity Correction, 3rd Conference on PET/MR and SPECT/MR (PSMR2014), Helona Resort Kos Island Greece.
- 18) MS Shandiz, MH A'arabi, P Gafarian, HS Rad and MR Ay. A hybrid method for generation of attenuation map for MR-based attenuation correction of PET data in prostate PET/MR imaging, 3rd Conference on PET/MR and SPECT/MR (PSMR2014), Helona Resort Kos Island Greece.
- 19) AF Kazerooni, MH A'arabi, MR Ay and HS Rad. A Fully Automated and Reproducible Level-set Segmentation Approach for Generation of MR-based Attenuation Correction Map of PET Images in the Brain Employing Single STE-MR Imaging Modality, 3rd Conference on PET/MR and SPECT/MR (PSMR2014), Helona Resort Kos Island Greece.
- 20) AF Kazerooni, MH A'arabi and HS Rad. Optimal Decision Tree for Classification of Benign and Malignant Ovarian Masses Based on DCE-MRI Quantitative Parameters Employing Hierarchical Clustering Approach, Proceedings of 22nd ISMRM Scientific Meeting and Exhibition, 2014, Milan. Italy
- 21) MH A'arabi, AF Kazerooni and HS Rad Joint Segmentation of Human Brain Skull and Soft-Tissue from Single Short-TE MR Imaging Modality, 20th Annual Meeting of the Organization for Human Brain Mapping (OHBM 2014), Homburg, Germany.

Honors

No. 1: M.Sc., institutional, Tehran University of Medical Science (TUMS), 2012 – 2015

6th Place: Entrance Exam of M.Sc., Ministry of Health and Medical Education, 2012

310th Place: Nationwide entrance exam of universities, national, 2007

Ad-hoc Reviewer

Human Brain Mapping, European Radiology, Brain Imaging and Behavior, Parkinsonim and Related Disoder, Scientific Report

Skill

- 1. Expert in Matlab Programming.
- 2. Expert in Diffusion MRI analysis.
- 3. ExploreDTI, Brain Connectivity Toolbox, NBS Toolbox, MRVISTA (Stanford), Brain-Life Platform, FSL, SPM, Slicer, MITK Diffusion, Diffusion Toolkit, Medinria, MATLAB, MRtrix3 and CMTK.