CURRICULUM VITAE

Personal Information

□**Full Name**: Zahra Farshidfar

□**Gender**: Female

- **Marital Status**: Single

- **Nationality**: Iranian

- **Date of Birth**: 06/ 24/ 1982

- **Email**: farshidfar@sums.ac.ir

- **Department:** Radiology & Radiobiology

- **Faculty:** School of Paramedical Sciences

- **University**: Shiraz University of Medical Sciences, Shiraz, Iran

Academic Background:

- PhD of Cognitive Neuroscience- brain and cognition- Shahid Beheshti University, Tehran, Iran, 2022, GPA: 18.35 out of 20. The title of my thesis is: **"The evaluation of emotional response control in counter to emotional stimuli in patients with prefrontal lesions using fMRI before and after surgery"**.

- Master of Science in Medical Imaging Technology- MRI from Shahid Beheshti University of Medical Sciences and Health Services, Tehran, Iran, 2013, GPA: 19.25 out of 20. The title of my thesis is: **"The application of diffusion tensor tractography in presurgical assessment of cerebral gliomas"**.

- Bachelor of Science in Radiological Technology, Shiraz University of Medical Sciences and Health Services, Shiraz, Iran, 2005, GPA: 17.57 out of 20.

Journal Papers :

1. Morphometric variation in central airways of ten different human lung. Biomedical Physics and Engineering Express, 2025, vol. 11

2. Evaluation of Response Inhibition in the Face of Cognitive and Emotional stimuli in Patients with Frontal Lobe Tumors before and after Surgery. Archives of Advances in Biosciences, March 2023, Vol. 14, No. 1

3. Differentiating Between Low- and High- grade Glioma Tumors Measuring Apparent Diffusion Coefficient Values in Various Regions of the Brain. Oman Medical Journal, 2021, Vol. 36, No. 2

4. Details of the physiology of the aerodynamic and heat and moisture transfer in the normal nasal cavity. Respiratory Physiology & Neurobiology, June 2020, VOL. 280

5. Evaluation of diffusion anisotropy and diffusion shape in grading of glial tumors. Journal of biomedical physics and engineering, 2019, Vol. 9, No.4

6. Evaluation of Respiratory Triggered Diffusion-Weighted MRI with Three b-Values Compared to ADC Map and Fast Spin Echo Heavily T2W in Differential Diagnosis of Hemangioma from Malignant Liver Lesions. Journal of Medical Imaging and Radiation Sciences, 2018, VOL.49, No. 3

7. The optimization of magnetic resonance imaging pulse sequences to better detection of multiple sclerosis (MS) plaques. Journal of Biophysics and Engineering, 2017, Vol. 7, No. 3

8. Diffusion tensor imaging for glioma grading; Analysis of fiber density index. Basics and clinical neuroscience, 2017, Vol. 8, No.1

9. Determination of intra-axial brain tumors cellularity through the analysis of T2 Relaxation time of brain tumors before surgery using MATLAB software. Electronic Physician Journal, August 2016, Vol. 8, No. 8

10. The accuracy of diffusion tensor magnetic resonance imaging in glial tumors grading based on fractional anisotropy. Journal of Mazandaran university medical sciences, 2015, Vol. 25, No. 134

11. Diffusion tensor tractography in the presurgical assessment of cerebral gliomas. The Neuroradiology Journal (NRJ), February 2014, Vol. 27, No. 1

12. Diffusion tensor tractography can affect treatment strategy to remove brain occupying mass lesions. Journal of paramedical sciences (JPS), Summer 2013 VOL.4, No. 3

Conference Lectures:

1) Evaluation of response inhibition in counter of emotional stimuli in patients with prefrontal tumor using fMRI before and after surgery. 9th Conference of Cognitive Sciences, 2024, Tehran, Iran

2) How does the ability to emotional inhibition change in brain tumor patients? 9th Conference of Cognitive Sciences, 2022, Tehran, Iran

3) Evaluation of response inhibition in counter of emotional stimuli in patients with prefrontal tumor. 37th Iranian congress of radiology, 2022, Tehran, Iran

4) The role of neuroimaging in diagnosis of cognitive disorders. 17th Congress of IRSA, 2022, Tehran, Iran

5) The application of diffusion tensor imaging in diagnosing the cognitive disorders. 3rd Annual National Student Congress, 2017, Tehran, Iran

6) Diffusion tensor tractography can affect treatment strategy to remove brain occupying mass lesions. 3rd Iranian Congress on Human Brain Mapping, 2016, Tehran, Iran (Poster)

7) Diffusion tensor tractography in the presurgical assessment of cerebral gliomas. 29th Iranian congress of radiology, 2013, Tehran, Iran

8) Diffusion tensor tractography can affect treatment strategy to remove brain occupying mass lesions. 14th Students International Conference on Biomedical and Interdisciplinary Research, 2013, Mazandaran, Iran

9) The optimization of magnetic resonance imaging pulse sequences to better detection of multiple sclerosis (MS) plaques. 8th Annual Students Research Congress of Shahid Beheshti University of Medical Sciences, 2012, Tehran, Iran (3rd top article)

10) The application of functional magnetic resonance imaging from language system in patients with tumor and temporal lobe epilepsy(mini review). The first symposium on the role of basic science on health promotion, 2012, Tehran, Iran

11) The optimization of magnetic resonance imaging pulse sequences to better detection of multiple sclerosis (MS) plaques- 9th international Iran MS congress,

2012 (The best article in 13th annual research congress of Iran's medical sciences student- Babol, 2012)

12) Dose assessment and measurement of vital organs in chest radiography. 8th Congress of IRSA, May 2010, Tehran, Iran

Teaching Workshop:

1) Physical principles of fMRI and DTI. IRSA, 2018, Tehran, Iran

2) MRI physics, Shariati Hospital, 2018, Isfahan, Iran

3) Learning the basics of MRI, Shiraz University of Medical Sciences, 2013, Shiraz, Iran

4) MRI protocols, Shiraz University of Medical Sciences, 2013, Shiraz, Iran

Participated in these cources:

1) FSL course. University of Oxford (online), 2023

2) DTI and Tractography, NIAG(TUMS), 2021, Tehran, Iran

3) Functional MRI and advanced data analysis, NIAG(TUMS), 2019, Tehran, Iran

4) Advanced neuroimaging tractography technique, NBML, 2018, Tehran, Iran

5) 2nd Shiraz neuroscience summer school, brain signal processing, 2018, Shiraz, Iran

6) Event Related Potential analysis in cognitive evaluation, Institute for Cognitive Science Studies, 2017, Tehran, Iran

7) Theoretical and Practical MRS in Neuroimaging, NBML, 2017, Tehran, Iran

Honors:

1. Honor student in all educational levels:
   - 2004
   - 2006
   - 2010
   - 2011
   - 2012
2. Top rank in the Master of Science entrance competition exam-2010

Interest fields:

- Neuroimaging
- Cognitive Science
- Neuroscience
- Medical Imaging

Professional Experiences:

- ➢ Radiology technologist at Shiraz Namazi hospital (2004-2009).
- ➢ Teaching practical skills in radiology at school of paramedicine -Shiraz University of Medical Sciences (2006-2010).
- ➢ Teaching "the application of computer in medical imaging" (MRIcro, ImageJ) – Shahid Beheshti University of Medical Sciences (2012)
- ➢ Teaching "MRI Physics and Techniques"- Shiraz University of Medical Sciences (Since 2013)
- ➢ Teaching practical skills in MRI at school of paramedicine -Shiraz University of Medical Sciences (Since 2013).
- ➢ Teaching "Evaluation of medical imaging I and II"- Shiraz University of Medical Sciences (Since 2021)
- ➢ Teaching "the application of computer in medical imaging"– Shiraz University of Medical Sciences (Since 2022)
- ➢ Have experience with MRI scanner, Siemens, Avanto and Spree, 1.5 tesla (Since 2013)
- ➢ Have experience with MRI scanner, GE, 1.5 tesla (Since 2023)
- ➢ Co-operation with Kehkashan electronic Co. to design MRI simulator
- ➢ Advisor in thesis of MSc students of medical physics
- ➢ Judging articles in 17th Congress of IRSA

Language Proficiency:

Persian: Native

English: Upper intermediate

German: Beginner

Skills:

1. Teaching skills
2. Research skills

experience with following software:

1) FSL
2) MEDINRIA
3) SPM16(f MRI)
4) DTI Studio
5) 3-D slicer
6) MRICro

7) Image J
8) MATLAB