

Nafiseh Ghavami

Email: ghavamina@gmail.com

**Address: Advanced Diagnostic and Interventional Radiology Research Center
(ADIR), Imam Khomeini Hospital, Tehran University of Medical Sciences,
Tehran, Iran**

Education

Bachelor of Science in Radiology, Iran University of Medical Science, 2000-2004

Bachelor of Science in Medical Engineering, Payam Noor University, 2011-2015

Master of Science in Electrical Engineering, Electronic Digital Systems, Iran University of Science & Technology, 2015-2017

Thesis Topic: Pain Recognition using Textural Features

Professional experiences

- Full time cooperation with Advanced Diagnostic & Interventional Radiology Research Center, from 2005
- Full time cooperation with Iranian journal of Radiology, from 2010
- Part time cooperation with Ale Ahmad Radiology clinic, Jun 2008 to Jun 2009
- Part time cooperation with Arman Novin Andish scientist company, 2005-2006
- Setting up Iranian Radiology for technologist website, 2004-2008
- Journalistic activities with several medical journals 2006-2010

Research and Scientific Activity

- MRI workshop, Iranian Thechnologist NGO , 70 hours, summer of 2004
- CT scan, Iranian Thechnologist NGO , 60 hours, 2004
- Basic Research Methods in Medical Sciences, Iran university of medical science, 25 hours , 2005
- Searching of electric sources, Tehran university of Medical Sciences, 1 day,2005
- Contrast Media application in Medical Imaging, Siemens company, 2005
- Neuroradiology imaging, Schering company,2005
- MRI corse, Tehran university of Medical Sciences , 14 hours , 2006
- CT scan, Tehran university of Medical Sciences , 10 hours, 2006
- Bone Densitometry, Tehran university of Medical Sciences , 10 hours, 2006
- Protection & Radiobiology, Anvar institute , 70 hours , 2008

- Radiology congress,2004 -2013
- First seminar of new medical equipment and technology, Tehran university of medical science, Aug 2012
- Seminar of PACS, Tehran university of medical science, Aug 2012
- Third symposium of electronic hospital and telemedicine, Tehran university of medical science, Aug 2012
- FMRI & Data Analysis course , Neuro Imaging and Analysis Group, 17-19 Feb
- Elementary DWI course, Neuro Imaging and Analysis Group,2015
- Systematic Review, neuroscience research center, Emam Khomeini hospital, Aug 2015
- Meta analyses, neuroscience research center, Emam Khomeini hospital, Aug 2015
- advance DWI course, Neuro Imaging and Analysis Group, 17-19 May 2016
- Mosfet Dosimetry, Sept 2016
- Diffusion Tensor Imaging: Elementary Level, Tehran, 17-19 February 2016
- Diffusion Tensor Imaging: advanced Level, Tehran, 17-19 May 2016
- search in Pubmed, Tehran university of medical science, 2016
- Systematic Review, Tehran university of medical science 2016
- Meta analysis, Tehran university of medical science 2016
- health and safety at work, , Iran University of Science & Technology, summer 2017
- Neuroscience and cognitive sciences, elementary course,6 month, 2020
- Introduction to Python Programming Language,July 2021 in 10 session
- Neuroscience and cognitive sciences, Complementary course,6 month, 2020
- Practical workshop of 3D analysis and modeling of medical images using Mimics software ,2023
- Deep learning in python August & September 2023
- Medical Image Processing in python July 20&21, 2023
- Artificial Intelligence in Medical Imaging, April 2025

Research Publication

- Hosseini, S.M., Sohrabi-Ashlaghi, A., Kolahi, S., (...), **Ghavami, N.**, Firouznia, K. Structural and diffusion imaging in olfactory-related brain regions in Parkinson's disease: predictors of clinical progression
Scientific Reports, 15(1), 2025-12-1
- Hossein Ghanaati , Diana Zarei , Mahbod Issaiy , **Nafiseh Ghavami** , Madjid Shakiba , Jayran Zebardast , Hedayat Abbastabar , Amir Hossein Jalali , Kavous Firouznia
"Efficacy and Safety of Preoperative Embolization in Glomus Jugulare Tumors: A Systematic Review and Meta-Analysis of Clinical Outcomes and Complications

- Hossein Ghanaati, Amir Hossein Jalali, Madjid Shakiba, Diana Zarei, **Nafiseh Ghavami**, and Kavous Firouznia
Long-Term Clinical and Imaging Findings in Patients with Lower Extremity Varicose Veins Treated with Endovenous Laser Treatment: A Follow-Up Study of up to 12 Years,"
International Journal of Vascular Medicine, February 2024
- Seyyed Mohammad Ghodsi, Alireza Khoshnevisan, Mahdi Arjipour, Hossein Ghanaati, Kavous Firouznia,* Amir Hossein Jalali, Madjid Shakiba, and **Nafiseh Ghavami**
Diagnostic efficacy of perfusion magnetic resonance imaging in supratentorial glioma grading
Iran J Radiol. 2018 April; 15(2):e13696.
- Ghanaati, H., Sanaati, M., Shakiba, M., Bakhshandeh, H., **Ghavami, N.**, Aro, S., Jalali, A.H., Firouznia, K
Pregnancy and its Outcomes in Patients After Uterine Fibroid Embolization: A Systematic Review and Meta-Analysis
CardioVascular and Interventional Radiology2020
- Ghanaati H, Firouznia K, Rezaei M, Shakiba M, **Ghavami N.**
Management of Osteoid Osteoma Using Radiofrequency Ablation
Iranian Journal Of Radiology Volume: 17 Issue: 1 Published: JAN 2020
- Ghazaleh Amjad , Mehdi Zeinali Zadeh , Farid Azmoudeh-Ardalan , Amir Hossein Jalali 4 , Madjid Shakiba , **Nafiseh Ghavami** , Zeynab Oghabian , Mohammad Ali Oghabian , Saba Firouznia , Behrouz Rafiei , Parto Sabet Rasekh , Farzad Tahmasebi Arashloo , Kavous Firouznia
Evaluation of multimodal MR imaging for differentiating infiltrative versus reactive edema in brain gliomas
British Journal of Neurosurgery 2020 Dec 2;1-9.
- Hassan Hashemi, Hossein Ghanaati, Somayeh Behzadi, Mohammad Hossein Harirchian, Ghazaleh Amjad, Madjid Shakiba, **Nafiseh Ghavami**, Hamed Naghibi and Kavous Firouznia
Comparison of Gadovist and Magnevist in Brain Magnetic Resonance Imaging of Multiple Sclerosis Patients with an Acute Attack
Iran Red Crescent Med J. 2021 February; 23(2):e192
- Hossein Ghanaati, MD, Mahsa Alborzi Avanaki, MD, **Nafiseh Ghavami, MS**, Hedayat Abbastabar, PhD, Madjid Shakiba, MD, Sina Firouznia, Amir Hossein Jalali, MD, PhD, and Kavous Firouznia,
Pregnancy Rate and Outcomes Following Uterine Artery Embolization for Uterine Arteriovenous Malformations: A Systematic Review and Meta-Analysis

Presentation

- G. Amjad, D. Firouznia, D. Zeinalizadeh, H. Ghanaati, A. Jalali, M. Shakiba, P. Sabetrasekh, **N. Ghavami**,
Exact differentiation of tumoural borders in patients with glioma by MRS and diffusion magnetic resonance imaging
ECR, March 3, 2017
- **Ghavami N**, Ayatolahi A, Matin H
Pain Recognition using Textural Features,
Image Processing congress, Esfahan, 2017
- Matin H, Ayatolahi A, **Ghavami N**
Pain Recognition using Textural Features
Image Processing congress, Esfahan, 2017

Projects

- Angiography of SAH patients refers to medical imaging center during 1998-2006
- Clinical trial of evaluation of effects of Simvastatin on MS patients, 2005
- Comparison of absorbed dose of ovaries during Uterine Artery Embolization (UAE), with conventional DSA & Flat Panel angiography system, 2007-2009
- Comparison of diagnostic efficacy of gadovist contrast media with magnevist in detecting of active plaques in brain MRI of the patients with acute attack of the multiple sclerosis 209-2010
- assessment of efficacy and side effects of transarterial chemoembolization (TACE) of liver in patients with hepatocellular carcinoma (HCC)-2011-2012
- evaluation of Carotid artery dopler ultrasonography findings in coronary artery revascularization candidates, 2010
- Evaluation of complications and efficacy of Endo Vascular Laser Ablation treatment in the treatment lower limb varices, 2010-2011
- Study of Radiologic and sonographic Equipments Installed in Units of Tehran University of Medical Sciences in 2009-10
- Comparison of the diagnosis sensitivity of brain cystic lesions in three imaging modality of conventional MRI, MRS and DWI of three tesla apparatus 2011-2012
- Evaluation of concordance between MRI, TVS, Collor doppler sonography with pathological Findings indeterming degree of myometrial invasion inpatients with endometrial cancer referred to imam khomeini hospital in 2011
- Evaluation of DWI , ADC map, perfusion MRI, and MRS sequences in defferentiating Infiltrative versus Reactive edema in Brain Glioma 2014
- Comparison Of Unenhanced&Enhanced 3d- Tof Mra With Digital Subtraction Angiography Findings In Monitoring Coiled Cerebral Aneurysms 2014
- Evaluation of efficacy and complications of prostatic arterial embolization in the treatment of BPH -2014
- Evaluation of safety and efficacy of infrapopliteal angioplasty for diabetic foot 2015
- Effect of uterine artery embolization (UAE) in patients with uterine fibroid on pregnancy: systematic review and meta analysis 2016
- Investigation of effectiveness and side-effects of embolization in the treatment of glomus jugular tumors in a systematic review and meta-analysis, 2020

- the efficacy and side effects of hemisphere in transarterial chemotherapy treatment of hepatocellular carcinoma of the liver (HCC): A clinical trial study, 2021
- Screening breast cancer through the detection of lesions in mammography images using interpretable deep neural networks, 2021
- Correlation of patterns and results of non-mass enhancement breast MRI with pathologic results, 2021
- Evaluation of the effectiveness of Trans-catheter Arterial Micro Embolization (TAME) in the patients with severe knee osteoarthritis, 2021
- Evaluation of the consequences of uterine artery embolization in the treatment of uterine venous malformations on fertility and pregnancy; a Systematic Review and Meta-Analysis, 2021
- Magnetic Resonance Perfusion, Diffusion, Spectroscopy and Volumetric Study of Choroid Plexus in Multiple Sclerosis patients; Pre and Post Treatment study by Rituximab and Natalizumab, 2022
- Investigation of effectiveness and side-effects of embolization in the treatment of glomus jugular tumors in a systematic review and meta-analysis, 2022
- Evaluation of linguistic -cognitive changes before and after, one month and three months after AVM embolization, 2022
- Designing and developing a machine learning model to report breast tissue composition, by processing mammography images recorded at the Cancer Institute of Imam Khomeini Hospital Complex, Tehran, March 2022 - March 2023
- Investigating structural connectivity based on diffusion tensor imaging in migraine patients and comparing it with normal subjects in a case-control study, 2024
- Comparing the efficacy and adverse events of Dotascan MRI contrast agent with Dotarem in patients with brain tumor: In a randomized cross-over clinical trial, 2024
- Evaluation of Short- time and Long-time Clinical Outcomes and Imaging Features of Uterine Artery Embolization in Iranian Women with Uterine Fibroids: In a Five-Year Prospective Cohort Study, 2024
- Synthesis of gadolinium oxide nanoparticles as contrast agents in Magnetic Resonance Arthrography (MRA) of musculoskeletal trauma imaging, 2024
- Longitudinal Effects of Regional Amyloid β Accumulation on Selective Structural Connectivity Reorganization in Cognitively Normal Aging, 2025
- Longitudinal Effects of Glymphatic Dysfunction on Brain Network Reorganization and Motor Symptom Progression in Parkinson's Disease, 2026
- Predictive Value of DTI-ALPS for Longitudinal Changes in Cerebral Small Vessel Disease Markers and Cognitive Function in Cognitively Normal Older Adults: A 3-Year Cohort Study from the Harvard Aging Brain Study, 2026

Honors and Rewards

First degree of Bs & Ms of Radiology
First degree in MRI & CT course

Language skill

Persian: native
English: good

Skills

ICDL, SPSS , MATLAB , Python, Image segmentation, FSL, Mimics software, Image processing, machine learning, Web design(VS code)

Interesting in

Image Processing , AI in medicine, web design