

Personal Resume

Personal Information

First and Last Name: Salman Jafari

Employment Status: Formal

Educational Department: Radiology

Academic Rank : Associate professor

Contact Number: 08138381039(224)

Address: Hamedan, Mahdiah St., Shahid Fahmideh Blvd., Ibn Sina University of Medical Sciences, Faculty of Paramedical Sciences, Department of Radiology

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Educational Information

Specialized or Professional Doctorate: PhD in Medical Physics

Thesis or Dissertation Title: Isfahan University of Medical Sciences. Dissertation: Evaluation of cytotoxicity and synergistic effects of megavoltage X ray combination with targeted superparamagnetic nanoparticles loaded with lomustine on U87-MG cancer cells

Year of Graduation: October 2016

Master's Degree: MSc in Medical Physics

Thesis Title: Isfahan University of Medical Sciences. Dissertation: Radiation absorbed dose in coronary CT angiography: Evaluation of the absorbed dose to the patient's skin, thyroid and eyes and compare to the conventional angiography.

Year of Graduation : March 2012

Bachelor's Degree: Radiology

Year of Graduation: July 2008

Associate's Degree:

Year of Graduation

Executive Records:

Membership in local, provincial, national, and international associations and societies:

Iranian Association of Medical Physics

Educational Records:

Teaching Records:

Hamadan University of Medical Sciences (2016 to present)

Residency in Diagnostic Radiology

1- The Physics of MRI

2- The Physics of CT scan

MSc in medical Physics

1- English Language for Medical Physics

2- Physics of Diagnostic Radiology

3- Medical Imaging Systems

Core modules of BSc students in radiology

1- Physics of Diagnostic Radiology, BSc student

2- Record and display of images in medicine

3- Preliminary repairs and maintenance of radiology devices

4- English language for Radiology Technology

5- Ultrasound Physics

6- The Physics of CT scan

- 7- Techniques and clinical aspects of CT scan
- 8- The Physics of MRI
- 9- Techniques and clinical aspects of MRI
- 10- Quality assurance and control of medical imaging methods

□ Internships of BSc students in radiology (instructors)

- 1- Internship 2 (Radiography)
- 2- Internship 3 (Radiography)
- 3- Internship 4 (Radiography)
- 4- Internship of CT scan

Theses:

Research Background

Research Interests:

Published Books:

1. Jafari S. Advanced techniques and dosimetry concepts of CT, 1st edition. Tehran: Arshadan; 2020. 158 p.
2. (Translation) Hsieh J. Computed tomography: principles, design, artifacts, and recent advances: SPIE press; 2003.
3. (Translation) Hedrick, W.R., D.L. Hykes, and D.E. Starchman, Ultrasound physics and instrumentation. ISSN: 978-1933250083, Elsevier Mosby 2005.
- 4- Medical Imaging for Rehabilitation Students, Basics and techniques of radiology, CT scan and MRI, 1st edition. Tehran: Arshadan; 2021. 292 p.

Published Articles:

1. Jafari S, Kolivand S. Performance of Iterative Reconstruction in Image Space Algorithm in Combination with Automatic Tube Current Modulation Compared to Filtered Back Projection in Brain CT Scan. Journal of Biomedical Physics and Engineering. 2024;14(4):379-88.
2. Mirzaie E, Jafari S, Hadei SK, Nikzad S. Absorbed dose, effective dose and lifetime attributable risk of breast and thyroid cancers in coronary CT angiography: A comparison between 64 and 128 slice CT scanners. Radiation Physics and Chemistry. 2024;222:111845.
3. Jafari S, Heidari F, Asgari M, Sani KG, Khosravi H, Afzalipour R. Image Findings and Radiation Dose in Lung CT Scan of Patients With COVID-19 in Hamadan. 2024.
4. Jafari S, Alikarami A, Faraji K, Rezaie S, Ghazikhanlou Sani K. Lifetime Attributable Risk of Breast Cancer Incidence in Brain CT Scans. Middle East Journal of Cancer. 2024;15(3):217-25.
5. Hosseini M, Jafari S, Kolivand S, Mohammadi Y, Ghazikhanlou Sani K. Image quality and absorbed dose in pulmonary CT angiography: comparison between craniocaudal and caudocranial. Journal of Isfahan Medical School. 2024.
6. Farzanpour P, Khosravi H, Jafari S, Niczad S, Tapak L. Investigating the Effect of Using Different Image Reconstruction Kernels on the CT Number of Different Brain Tissues. Paramedical Sciences and Military Health. 2024;18(3):33-9.
7. Parniani J, Shahsavari Z, Jafari S, Zamani RM, Afzalipour R. Assessing the Level of Knowledge, Attitude, and Performance of Radiographers About Radiation Protection in Bandar Abbas, Iran. 2023.
8. Khosravi H, Sani KG, Nikzad S, Jafari S. Designing Flexible Shield From Lead With High Protection Against X-rays in Operating Room Using Monte Carlo Simulation. Avicenna journal of Care and Health in Operating Room. 2023;1(2):33-7.

9. Khosravi H, Sani KG, Jafari S, Nikzad S. Evaluation of the radiation protection capability of a low density and non-Lead composite shield using Monte Carlo model. *International Journal of Radiation Research*. 2023;21(4):833-6.
10. Khosravi H, Ghazikhanlusani K, Jafari S, Nikzad S. Evaluation of the Effect of Different Nanoparticles on the Mass Attenuation Coefficient of a Shield in Diagnostic Radiology: A Monte Carlo Study. *Frontiers in Biomedical Technologies*. 2023;10(4):427-32.
11. Heidari F, Saiedi M, Jafari S. Estimation of entrance surface dose and dose area product in most frequently used radiography examinations in Hamadan. *Avicenna journal of Care and Health in Operating Room*. 2023;1(1):11-5.
12. Barzanjeh SS, Jafari S, Hadei SK. The Influence of Adaptive Statistical Iterative Reconstruction Algorithm on Image Quality and Volume CT Dose Index in Head CT Scan Compared To Filtered Back Projection. *Iranian Journal of Medical Physics*. 2023;20(6).
13. Abdolmaleki M, Jafari S, Nikzad S. CAREdose 4D Application in Brain CT Scan: The Effect on Dose and Image Quality. *Frontiers in Biomedical Technologies*. 2023.
14. Talebi SA, Jafari S, Afzalipour R, Tabeie F, Shirmardi SP. Scatter Radiation Absorbed Dose Distribution in Coronary Angiography: A Measurement-Based Study. *Iranian Journal of Medical Physics*. 2022;19(4):250-7.
15. Nouri E, Delashoub O, Shahabi-Rabori MA, Afzalipour R, Jafari S. Interpretation of CT scan findings during the COVID-19 pandemic. *Hormozgan Medical Journal*. 2020;24(4):107909.
16. Jafari S, Tavakoli MB, Zarrabi A. Lomustine loaded superparamagnetic iron oxide nanoparticles conjugated with folic acid for treatment of glioblastoma multiforma (GBM). *Iranian Journal of Pharmaceutical Research: IJPR*. 2020;19(2):134.
17. Jafari S, Ghazikhanlu Sani K, Karimi M, Khosravi H, Goodarzi R, Pourkaveh M. Establishment of diagnostic reference levels for computed tomography scanning in hamadan. *Journal of Biomedical Physics & Engineering*. 2020;10(6):792.
18. Jafari S, Cheki M, Tavakoli M, Zarrabi A, Ghazikhanlu Sani K, Afzalipour R. Investigation of combination effect between 6 MV X-ray radiation and polyglycerol coated superparamagnetic iron oxide nanoparticles on U87-MG cancer cells. *Journal of biomedical physics & engineering*. 2020;10(1):15.
19. Delashoub O, Jafari S, Hajializadeh MS, Abdollahi H, Afzalipour R. Pregnant Women and Infants Infected with SARS-COV-2: A Brief Overview. *Disease and Diagnosis*. 2020;9(2):92-5.
20. Dastjerdi ZS, Abargouei EK, Jafari S, Eftekhari E, Pouretezari M, Rarani FZ, et al. Evaluation of Lomustine-Loaded Iron Nanoparticles on Caspase-6 Gene Expression and Cell Viability in U87MG Cell Line. *Disease and Diagnosis*. 2020;9(3):124-9.
21. Cheki M, Jafari S, Najafi M, Mahmoudzadeh A. Glucosamine protects rat bone marrow cells against cisplatin-induced genotoxicity and cytotoxicity. *Anti-Cancer Agents in Medicinal Chemistry (Formerly Current Medicinal Chemistry-Anti-Cancer Agents)*. 2019;19(14):1695-702.
22. Afzalipour R, Abdollahi H, Hajializadeh M, Jafari S, Mahdavi SR. Estimation of diagnostic reference levels for children computed tomography: A study in Tehran, Iran. *International Journal of Radiation Research*. 2019;17(3):407-13.
23. Rostampour N, Jafari S, Saeb M, Keshkar M, Shokrani P, Almasi T. Assessment of skyshine photon dose rates from 9 and 18 MV medical linear accelerators. *International Journal of Radiation Research*. 2018;16(4):499-503.
24. Ghasemi A, Jafari S, Salehi I. Synthesis and characterization of polyglycerol coated superparamagnetic iron oxide nanoparticles and cytotoxicity evaluation on normal human cell lines. *Colloids and Surfaces A: Physicochemical and Engineering Aspects*. 2018;551:128-36.
25. Tavakoli M-B, Faraji R, Sajjadih A, Jafari S. Determination of the weighted computed tomography dose index in coronary multidetector computed tomography angiography. *Journal of Isfahan Medical School*. 2016;34(398):1060-5.

26. Shahbazi-Gahrouei D, Asgarian M, Setayeshi S, Jafari S. The influence of low-frequency electromagnetic fields (ELFs) on MCF-7 cancer cells. *Journal of Isfahan Medical School*. 2016;33(362):2137-42.

27. Tavakoli MB, Heydari K, Jafari S. Evaluation of diagnostic reference levels for CT scan in Isfahan. *Glob J Med Res Stud*. 2014;1(4):130-4.

28. Tavakoli MB, Jabbari K, Jafari S, Hashemi SM, Akbari M. Evaluating the Absorbed Dose of Skin, Thyroid and Eye in Coronary Angiography CT Imaging and Its Comparison with Conventional Angiography. *Journal of Isfahan Medical School*. 2011;29(159).

Research Projects:

1- Iranian Journal of Medical Physics (IJMP), ISSN: 2345-3672, language: English. Index: Scopus, journal website link: <http://ijmp.mums.ac.ir>

2- Journal of Cancer Research and Therapeutics, language: English. Index: Science Citation Index Expanded, Web of Science, journal website link: <http://www.journalonweb.com/jcrt>

3- Colloids and Surfaces A: Physicochemical and Engineering Aspects, <https://ees.elsevier.com/colsua/default.asp>

4- International journal of radiation research(IJRR), Online ISSN: 2345-4229. journal website link http://ijrr.com/index.php?slc_lang=en&slc_sid=1

5- The Journal of "Frontiers in Biomedical Technologies". pISSN: 2345-5829 eISSN: 2345-5837, <https://fbt.tums.ac.ir/index.php/fbt>

6- Journal of Biomedical Physics and Engineering, Online ISSN: 2251-7200, <https://jbpe.sums.ac.ir/>

7- Nanomedicine Journal, Print ISSN 2322-3049, <https://nmj.mums.ac.ir/>

8- Avicenna Journal of Clinical Medicine, <https://sjh.umsha.ac.ir/en>

Participation in Conferences and Meetings

1- Tavakoli H M, Jabbari K, Salman J. SU-E-I-51: Investigation of Absorbed Dose to the Skin, Eyes and Thyroid of Patients during CT Angiography and Comparison with Conventional Angiography. Fifty-fourth annual meeting of the American association of physicists in medicine (AAPM). 2012.

2- Afzalipour R, Abdollahi H, Jafari S, Mahdavi SR. A local study on diagnostic reference levels estimation for children computed tomography. *Iranian Journal of Medical Physics*. 2018;15(Special Issue-12th. Iranian Congress of Medical Physics).