

Curriculum Vitae

1. General Information

First Name: Mehrdad

Last Name: Gholami

Rank: Assistant Professor



2. Contact Information

2.1) Professional Address

Work Address: School of Allied Medical Sciences, Lorestan University of Medical Sciences (LUMS), East Goladasht, Khorramabad, Iran. P.O. Box: 1996713883,

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2.2)E-Mail

gholami.mehrdad@lums.ac.ir, gholami@resident.mui.ac.ir, mhrgh@yahoo.com

3. Educational History

3.1) 2009- 2014; PhD in Medical Physics, Faculty of Medicine, Isfahan University of Medical Sciences (MUI), Isfahan, Iran

Title of Thesis: Accuracy evaluation of 3D dose distribution using the lung equivalent polymer gel dosimeter.

3.2) 1997-2000; M.Sc in Medical Physics, Faculty of Medical Sciences, Tarbiat Modarres University (TMU), Tehran, Iran

Title of thesis: Effect of laser irradiation on motor evoked potential on injured spinal cord of rat.

3.3) 1992- 1994; BSc in Radiology Technology, Faculty of Allied Medical Sciences, Tabriz University of Medical Sciences (TUOMS), Tabriz, Iran

3.4) 1989- 1991; Associate degree in Radiology Technology, Faculty of Allied Medical Sciences, Shahid Beheshti University of Medical Sciences (SBMU), Tehran, Iran

4. National Professional Societies Membership

1.1) Iranian Association of Medical Physicists (IAMP), 2000- present

5. Teaching Experiences

Medical Physics, Radiation Physics, Computed Tomography Physics, Radiation Protection Courses, the Physics of Diagnostic Radiology, Ultrasound Physics, Quality control & Assurance in Medical Imaging Equipments. LUMS, 2001- present

6. Major Areas of Research Interests

6.1) Development of low density polymer gel dosimeters for application in radiation therapy dosimetry

6.2 Optimization the Medical Imaging techniques including conventional & interventional procedures (experimental & simulation methods)

6.3) Research and development in IAEA protocols in Diagnostic Imaging & Radiation Protection

6.4) Research in Environmental Radiation Protection (Ionizing & non- Ionizing)

6.5) Research and Innovation in herbal radioprotectors.

7. Professional Training

7.1) Regional workshop on patient dose assessment and dose management in diagnostic and interventional, radiology. Doha, Qatar, 18th – 21th December 2011 Invited by IAEA

7.2) National training course on Computed Digital Radiography (principles of operation, quality control and patient safety). Tehran, Iran, 20th -23th November 2011 Invited by IAEA

7.3) International workshop on Advances in Radiotherapy Physics & Technology. Shiraz, Iran, 1th November 2011, Invited by Middle East Federation of Organizations of Medical Physics (MEFOMP)

7.4) Participation in the 1th MEFOMP international conference of Medical Physics. Shiraz, Iran, 2th -4th November

7.5) Regional workshop on Monte- Carlo MCNPX4 and its application on Radiation therapy. Tehran, Iran, 16th – 21th October (50 hrs) 2011

7.6) Service course in the Storz Lithotripter Modulith SLK including the X ray system Philips BV family. Kreuzlingen, Switzerland, September/ October (15 days) 2007

8. Scientific-Executive Records

8.1) Director of education of Allied Medical Sciences Faculty, LUMS, Khorramabad, Iran, 2014- present

- 8.2) Director of Student Research Committee in Health & Allied Medical Sciences Faculties, LUMS, Khorramabad, Iran, 2013- 2015
- 8.3) Head of Medical Physics Department, Faculty of Medicine, LUMS, Khorramabad, Iran, 2006- 2008
- 8.4) Head of Radiology Sciences Department, Faculty of Allied Medical Sciences, LUMS, Khorramabad, Iran, 2013- 2016
- 8.5) Director of Health Physics, LUMS, Khorramabad, Iran, 1999-2009
- 8.6) Director of Medical & Laboratory devices division, LUMS, Khorramabad, Iran, 2003-2009
- 8.7) Council member of Education at LUMS, Khorramabad, Iran, 2015-present
- 8.8) Council member of research at faculty of Allied Medical Sciences, LUMS, Khorramabad, Iran, 2015- present
- 8.9) Council member of the University publications, LUMS, Khorramabad, Iran, 2016-present
- 8.10) Council member of Talent Student Support Committee, LUMS, Khorramabad, Iran, 2015-present
- 8.11) Council member of Health Technology Development Center, LUMS, Khorramabad, Iran, 2016- present

9. Publications

- 9.1. **Mehrdad Gholami**, Somayeh Gharloghi, Soodabeh Zare, Arezoo Saki, Zahra Piri, Majid Mousavi. Assessment of patient radiation dose in interventional procedures at Shahid Madani Heart Center in Khorramanad, Iran. [Iran J Med Phys](#) 2017; 14:128-134
- 9.2- Fateme Panahi, **Mehrdad Gholami**, Sara Mayahi. A survey of knowledge and attitude of staff and hospital administrations in the implementation of archiving and transmission of medical images (PACS) in hospitals in Ahwaz. [Iran J Radiol](#) 2017; Special issue(5):e48318
- 9.3. Vahid Karami, Mansour Zabihzadeh, Nasim Shams, **Mehrdad Gholami**. Radioprotection to the Gonads in Pediatric Pelvic Radiography: Effectiveness of Developed Bismuth Shield. [Int J Pediatr](#) 2017; 5(6): 5153-5166
- 9.4- Somayeh Gharloghi, **Mehrdad Gholami**, Abbas Haghparast, Vahab Dehlaghi. Numerical Study for Optimizing Parameters of High-Intensity Focused Ultrasound-Induced Thermal Field during Liver Tumor Ablation: HIFU Simulator. [Iran J Med Phys](#) 2017; 14(1):15 -22

- 9.5- Mojtaba Ghorbanipour, Azamalsadat Hosseini Alhashemi, Somayeh Gharloghi, Mahin Adeli, **Mehrdad Gholami**. Health Risk Assessment of Natural Background Radiation in Residents of Khorramabad, Iran. [Iran J Med Phys](#) 2017; 14(1): 23-28
- 9.6- **Mehrdad Gholami**, D. Shahbazi-Gahrouei. The effect of gel homogeneity on dose response in a low density polymer gel dosimeter for radiation therapy. [Journal of Cancer Research and Therapeutics](#) <http://www.cancerjournal.net> on Saturday June 25, 2016, IP: 5.221.158.247
- 9.7- Vahid Karami, Mansour Zabihzadeh, and **Mehrdad Gholami**. Gonad Shielding for Patients Undergoing Conventional Radiological Examinations: Is There Cause for Concern?. [Jentashapir J Health Res](#) 2016; 7(2):e31170
- 9.8- Vahid Karami, Mansour Zabihzadeh, **Mehrdad Gholami**, Nasim Shams, Zahra Fazeli Nezhad. Dose reduction to the Thyroid Gland in pediatric chest radiography. [Int J Pediatr](#) 2016, 4(7), 2183-2191
- 9.9- **M. Gholami**, D. Shahbazi-Gahrouei, T. Allahverdi Pourfallah. Dose response evaluation of a low density anoxic polymer gel dosimeter using MRI. [Int J Radiat Res](#) 2015; 13 (3):243- 249
- 9.10- **Mehrdad Gholami**, Fataneh Nemati, Vahid Karami. The evaluation of conventional X- ray exposure parameters including tube voltage and exposure time in private and governmental hospitals of Lorestan province, Iran. [Iran J Med Phys](#) 2015, 12(1): 85-92
- 9.11- **M. Gholami**, H. R. Khosravi, F. Ebrahimzadeh, S. Mayahi. Diagnostic Reference Levels (DRLs) for routine X - ray examinations in Lorestan province, Iran. [Int J Radiat Res](#) 2015; 13 (1): 85- 90
- 9.12- D. Shahbazi-Gahrouei, **M. Gholami**, T. Allahverdi Pourfallah, M. Keshtkar. Does nitrogen gas bubbles through the low density polymer gel dosimeter solution affects polymerization process?. [Advanced Biomedical Research](#) 2015; 4(88):1-5
- 9.13- M. Keshtkar, A. Takavar, M.H. Zahmatkesh, A. Vaezzadeh, **M.Gholami**, Z. Ghasemian. Application of polymer gel dosimetry in dose verification of IMRT. [Journal of Frontiers in Biomedical Technologies \(FBT\)](#) 2014, 1(4): 279-283
- 9.14- D. Shahbazi-Gahrouei, **M. Gholami**, S. Setayandeh. A review on natural background radiation. [Advanced Biomedical Research Journal](#) 2013, 2(3):1-6
- 9.15. Shahbazi Gahrouei D, Setayandeh S, **Gholami M**. A review on comparison of natural radiation in Iran with other countries. [Int J Low Radiation](#) 2013; 9(1): 1-11
- 9.16. **M. Gholami**, S Mirzaei, Jomehzadeh A. Gamma background radiation measurement in Lorestan Province, Iran. [Iran J Radiat Res](#) 2011; 9(2):89-93

9.17. **M. Gholami**, L Yousefi. Solar Ultraviolet B radiation monitoring in Khorramabad City, Iran. [Iran J Radiat Res](#) 2009; 7(3): 171-175

9.18. **M. Gholami**, M R. Abedini, H R. Khosravi, S Akbari. Risk from ionizing radiation during pregnancy. [Yafteh](#) (LUMS Journal) 2007; 9(31): 63-71

9.19- **M. Gholami**. What you need to know about electroshock. Iran's monthly magazine on [Med. & Lab. Equipment](#) 2005; 49: 23- 25

9.20- **M. Gholami**. Tips about sterilization. Iran's monthly magazine on [Med. & Lab. Equipment](#) 2005; 50: 65- 67

9.21- **M. Gholami**. Ultraviolet lamps and its disinfectant properties. Iran's monthly magazine on [Med. & Lab. Equipment](#) 2003; 26: 33-35

9.22- **M. Gholami**. Microwave- induced thermoacoustic tomography using multi sector imaging. Iran's monthly magazine on [Med. & Lab. Equipment](#) 2002; 21:24- 26

9.23. **M. Gholami**, S M. Firouzbadi, H A. Kazemzadeh, H K. Moghadam. Effect of laser on motor evoked potential on injured spinal cord of rats. [Yafte](#) (LUMS Journal) 2002; 4(12): 9-15

9.24. **M. Gholami**, S M. Firouzabadi, H K. Moghadam. Effect of GaAlAs laser irradiation on histologic repair of compression spinal cord injuries of rats. [Yafte](#) (LUMS Journal) 2001; 3(1): 37-41

10. Papers presented in National & International conferences

10.1. **Gholami M**, Mirzaei S, Jomehzadeh A. Gamma background radiation measurement in the Lorestan Province, Iran. The 8th international conference on high levels of natural radiation and radon areas (oral). 2014; 1th -5th September, Prague, Czech Republic

10. 2. **Gholami M**. 3D Polymer gel Dosimetry (Accepted for Oral Presentation but didn't presented), 4th Asia Pacific Symposium on radiation Chemistry (APSRC-2012), Oct. 30-Nov. 3, 2012, Huangshan, anhui, China

10. 3. **Gholami M**. Comparison of ESAK_s in film-screen, computed radiography and direct digital radiography”(Oral)” 28th Iranian Congress of radiology, May 15th – 18th, 2012, Tehran, Iran

10.4. **Gholami M**, Mirzaei S, Jomehzadeh A. Gamma background radiation measurement in the Lorestan Province in Iran. (Poster)9th Iranian congress of Medical Physics, May 19th -20th 2010, Tehran, Iran

10.5. Jomehzadeh Z, Jomehzadeh A, **Gholami M**. Gamma dose rate and dose rate

calculation for sensitive organs in the vicinity of hot spring in Kerman province. (Poster) 9th Iranian congress of Medical Physics, May 19th -20th 2010, Tehran, Iran

10.6. **Gholami M.** Radiographic assessment of urinary stones in patients treated by ESWL in general Shohada-y- Ashayer hospital in Khorramabad city. (Oral) the 1th Research festival of the Radiological Sciences students, November 7th -8th 2010, Shiraz, Iran

10.7. Jomehzadeh A, Jomehzadeh Z, **Gholami M.** Gamma dose rate measurement in BiBi Hayat region in Rafsanjan. (Poster) 9th Iranian congress of Medical physics, 19th -20th 2010, Tehran, Iran

10.8. Jomehzadeh A, **Gholami M.** Survey of Sodium Iodide¹³¹ contamination at nuclear medicine department in Shafa Kerman hospital. (Poster) the 1th research festival of the Radiological sciences students, November 7th -8th 2010, Shiraz, Iran

10.9. **Gholami M,** Jomehzadeh A. Frequency determination and assessment of diagnostic exposure in Lorestan Province. (Oral) the 1th global student scientific research congress of regional cooperative committees –west division, March 11th -13th 2009, Khorramabad, Iran

10.10. **Gholami M.** Evaluation of theoretic knowledge of Medical Imaging staffs in Lorestan Province: Specification and Medical Imaging methods. (Oral) the 1th global student scientific research congress of regional cooperative committees –west division, March 11th -13th 2009, Khorramabad, Iran

10.11. **Gholami M,** Yousefi L. Solar ultraviolet B radiation monitoring in Khorramabad city in Iran. (Oral) South Asian Conference on Radiology (SACOR), March 28th -30th 2008, Katmandu, Nepal

11. Journal Reviewer

11.1) Reviewer for Iranian Journal of Medical Physics; the scientific journal of the Iranian Association of Medical Physicists (IAMP), 2014-present

11.2) Reviewer for International Journal of Radiation Research (IJRR), 2009-present

12. Patent & inventions

12.1) Gholami M, Zabihzadeh M, Karami V.

Title: The process of design and dosimetry of radioprotective gonadal shield using bismuth and lead materials

The use and effectiveness of traditional lead gonad shields in pediatric pelvic radiography has been challenged by several literatures over the past two decades. The

aim of this study was to develop a new radioprotective gonad shields to be use in pediatric pelvic radiography. Without increasing the dose to the breast, thyroid and the lens of the eyes, the use of bismuth shield has reduced the ESD of the pelvis and radiation dose to the ovaries by 62.2% and 61.7% respectively. Image quality remained diagnostically acceptable in all shielded and non shielded images, without non diagnostic or poor quality image. This project carried out in Ahvaz Jundishahpur University of Medical Sciences (AJUMS), Iran.

13. Workshops (Invited Lectures & participant):

2015; 1Day "Islamic Medicine" LUMS, Khorramabad, Iran
2014; 1Day speaking in "Preliminary Research Methods workshop, LUMS, Khorramabad, Iran
2010; 8Days "Ionizing Radiation Dosimetry" LUMS, Khorramabad, Iran
2009; 5Days "Planning the basic sciences in Medicine "LUMS, Khorramabad, Iran
2009; 2Days "Teaching Medical Imaging" LUMS, Khorramabad, Iran
2008; 2Days "MRI Course" LUMS, Khorramabad, Iran
2008; 2Days "Computed Tomography Course" LUMS, Khorramabad, Iran
2008; 2Days "Radiographic Anatomy" LUMS, Khorramabad, Iran
2008; 3Days "Management of Medical Equipment's "Heart Center of Tehran, Iran
2008; 2Days "Course Plan & Course Scheduling "LUMS, Khorramabad, Iran
2008; 2Days "Quality Control of Radiographic Imaging "LUMS, Khorramabad, Iran
2008; 2Days "Anatomy Course "LUMS, Khorramabad, Iran
2008; 1Day "Protection and Physical Health" LUMS, Khorramabad, Iran
2007; 2Days "Medical Ethics" LUMS, Khorramabad, Iran
2007; 4Days "Calibration Technology "LUMS, Khorramabad, Iran
2007; 4Days "How to use the newest imaging units? "LUMS, Khorramabad, Iran,
2007; 1Day "The Methods of medical Exposure Dosimetry" LUMS, Khorramabad, Iran
2006; 1Day "Fetal dose monitoring in Diagnostic Imaging "LUMS, Khorramabad, Iran
2006; 1Day "Teaching Sterilization by Plasma "LUMS, Khorramabad, Iran
2006; 2Days "EPI Technology "LUMS, Khorramabad, Iran
2006; 4Days "Primary of Quality Research Methodology "LUMS, Khorramabad, Iran
2006; 2Days "Microsoft Excel "LUMS, Khorramabad, Iran
2006; 1Day "Microsoft Power Point "LUMS, Khorramabad, Iran
2005; 5Days "Hospital Resources "Ramsar, Iran
2004; 2Days "Basic Concept of information & Technology "LUMS, Khorramabad, Iran
2004; 1Day "Computer & File Management "LUMS, Khorramabad, Iran
2004; 2Days "Microsoft Word "LUMS, Khorramabad, Iran
2003; 2Days "SPSS Course "LUMS, Khorramabad, Iran

14. Honors

- 14.1) Research Award, LUMS, 2015, (University Level)
- 14.2) Research Award, LUMS, 2010, (University Level)

- 14.3) Outstanding Health Physicist Award, LUMS, 2008 & 2009
- 14.4) Establishment of Nuclear Medicine Simulation Lab, LUMS, 2008
- 14.5) Establishment of Respiratory Lab, LUMS, 2007
- 14.6) Outstanding Health Ministry Award, Vice Versa President, 2005
- 14.7) Outstanding Staff Award, LUMS, 2000

15. Languages

- 15.1) Persian (native)
- 15.2) English (fluent in reading, writing and speaking)