CURRICULUM VITAE

• Personal Details:

Name: Wrya

Surname: Parwaie

Gender: Male

Marital Status: Married

Date of Birth: 21 March 1981

Nationality: Iranian

Phone: +988432227122:

Email: parwaie-w@medilam.ac.ir

- Current Position: Assistant Professor at Ilam University ofMedical Science
- Address: Department of Medical Physics, Faculty of Paramedical Sciences, Ilam University of Medical Sciences, Ilam, Iran

• Education:

- Doctor of Philosophy in medical physics, Tehran University of Medical Sciences (TUMS), www.tums.ac.ir
  - Research Areas: radiation therapy, radiation dosimetry, Monte Carlo simulation
  - Thesis: "Construction of a new gel dosimeter sensitive to low dose levels and assessment of its performance for out of field dosimetry in order to heart dose measurement in breast cancer treatment"
- Master of Science in medical physics, Tehran University of Medical Sciences (TUMS), www.tums.ac.ir, September 2010-december 2012, Tehran, Iran
  - Research Areas: radiation therapy, radiation dosimetry, medical imaging
  - Thesis: "Dosimetric evaluation of heterogeneity in small photon fields using polymer gel dosimeters, Gafchromic film and Monte Carlo simulation"

- Bachelor of Science in Solid State Physics, University of Kurdistan (UOK), www.uok.ac.ir, September 2000-julay 2005, Sanandaj, Iran

- High School: Field of Mathematics and Physics in SAMPAD (Iran's national organization for development of exceptional talents) Group, September 1995 - June 1999, Sanandaj, Kurdistan, Iran

• The main responsibilities:

- Faculty member department of radiation technology Hormozgan University of medical sciences, 2013-2016.
- Head of physics department of Bandar Abbas OMID radiotherapy center, 2013-2016.
- Head of health physics of Bandar Abbas OMID radiotherapy center, 2013-2016.
- Physicist in Bandar Abbas OMID radiotherapy center, 2013-2016.
- Physicist in Qom VALIEASR radiotherapy center, 2017-2020.
- Faculty member department of Medical Physics, Ilam University of medical sciences, 2020-present.

• Honors:

- Ranked 3th in nationwide university entrance exam for PHD of medical physics (2016).
- Ranked 4th in nationwide university entrance exam for M.Sc of medical physics (2010).

• Academic interests:

- Radiation Therapy
- Radiation Dosimetry
- Monte Carlo Simulation
- Radiobiology
- Medical Imaging

• Teaching Experience

- General Physics and Mathematics in high School, Dehgolan, Kurdistan, Iran 2006 – 2008.
- Radiation physic for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Radiation protection for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Dosimetry for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Physics of ultrasound imaging for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Physics of diagnostic radiology for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- General physics for radiology technologist students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Specialist physics for Occupational Health Engineering students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Anesthetic physics for anesthesiology students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- General physics for Environmental health engineering students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- Biophysics for Environmental health engineering students, Hormozgan University of medical sciences (HUMS), 2013-2016.
- General physics for Science Laboratory students, Ilam University of medical sciences, 2016-2017.
- Biophysics for Science Laboratory students, Ilam University of medical sciences, 2016-2017.
- Anesthetic physics for anesthesiology students, Ilam University of medical sciences, 2016-2017.
- Medical physics for operating room students, Ilam University of medical sciences, 2016-2017.

Research Experiences:

- Researcher in Clinical Radiotherapy Physics, OMID Radiotherapy Center, Hormozgan University of Medical Science, Bandar Abbas, Iran
- Researcher Assistance at IAMT (Institute for Advanced Medical Technologies)
- Researcher Assistance at NOVIN Medical Radiation center For Gel Dosimetry setup and preparation
- Researcher Assistance at Clinical Radiotherapy Physics, Cancer Institute, Tehran University of Medical Science, Tehran, Iran

Research Projects:

- Dosimetric evaluation of heterogeneity in small photon fields using polymer gel dosimeters, Gafchromic film and Monte Carlo simulation, Tehran University of medical sciences.
- Dosimetric evaluation of small photon fields using polymer gels, EBT2 Gafchromic films and Monte Carlo simulation in radiosurgery treatments, Kurdistan University of medical sciences.
- Evaluation of ICRP Standards in Diagnostic Radiology departments of hospitals in Hormozgan University of Medical Sciences, Hormozgan University of Medical Sciences.
- An assessment of Nurses' knowledge of the principles of radiation protection in hospitals of Bandar Abbas, Hormozgan University of Medical Sciences.
- Construction of a new gel dosimeter sensitive to low dose levels and assessment of its performance for out of field dosimetry in order to heart dose measurement in breast cancer treatment and comparison the results with Monte-Carlo simulation, Tehran University of medical sciences.
- Investigation the performance of the susceptibility weighted imaging in readout of the Fricke gel dosimeters and optimization of the imaging parameters, Tehran University of medical sciences.
- Evaluation of dual function of Fricke gel as a surface dosimeter and bolus compensator in the treatment of breast cancer using inhomogeneous phantom and comparing it’s results with Monte Carlo simulation, Tehran University of medical sciences.
- Improvement of PASSAG polymer gel dosymeter for high dose dosimetry, Tehran University of medical sciences.
- Dose Enhancement of Intraoperative Radiotherapy (IORT) using the Most Effective Nanoparticles for Human Breast Cancer Treatment, Tehran University of medical sciences.

- Publication:

  - Afkhami A.M, **Parwaei W**, Haghparast M. The impact of breast size on heart and lung doses in the treatment of breast cancer using 2 and 3 dimensional tangential fields. 2015;22(5):758-764.
  - MahmoudiNejad MH, **Parwaie W**. 3-D cell modeling and investigating its movement on non-rigid substrates. Molecular Medicine Journal. 2015;1(1):13-9.
  - **Parwaie W,** Yarahmadi M, Nedaie HA, Zahmatkesh MH, Barati AH, Afkhami M. Evaluation of MRI-based MAGIC polymer gel dosimeter in small photon fields. Int. J. Radiat. Res. 2016;14(1):57-63.
  - Kargar E, **Parwaie W,** Farhood B, Atazadegan Z, Afkhami Ardekani M. Assessment of Radiographers' Awareness about Radiation Protection Principles in Hospitals of Bandar Abbas, Iran. Iranian Journal of Medical Physics. 2017;14(1):47-52.
  - **Parwaie W,** Farhood B, Ardekani MA, Safari H. Evaluating the frequency of breast cancer risk factors in women referred to mammography center for breast cancer screening: a report from south part of Iran. Journal of Cancer Policy. 2018; 16:33-38.
  - Babaloui S, **Parwaie W**, Refahi S, Abrazeh M, Ardekani MA. Awareness Assessment of Nurses in the OR, ICU, CCU, and PICU about Radiation Protection Principles of Portable Radiography in Hospitals of Bandar Abbas, Iran. Journal of Radiology Nursing. 2018; 37(2):126-129.
  - Parwaie W, Refahi S, Afkhami Ardekani M, Farhood B. Different Dosimeters/Detectors Used in Small-Field Dosimetry: Pros and Cons. Journal of Medical Signals and Sensors. 2018; 8(3).
  - Mortezaee K, **Parwaie W**, Motevaseli E, Mirtavoos-Mahyari H, Musa AE, Shabeeb D, Esmaely F, Najafi M, Farhood B. Targets for improving tumor response to radiotherapy. International immunopharmacology. 2019; 76:105847.
  - **Parwaie W,** Geraily G, Shirazi A, Shakeri A, Massumi H, Farzin M. Analysis of the ferrous benzoic methylthymol-blue gel dosimeter in low-dose-level measurements. Radiation Physics and Chemistry. 2020 Aug 1; 173:108943.
  - **Parwaie W**, Geraily G, Shirazi A, Mehri-Kakavand G, Farzin M. Evaluation of ferrous benzoic methylthymol-blue gel as a dosimeter via magnetic resonance imaging. Physica Medica. 2020 Dec 1; 80:47-56.
  - **Parwaie W**, Geraily G, Shirazi A, Yarahmadi M, Shakeri A, Ardekani MA. Evaluation of lung heterogeneity effects on dosimetric parameters in small photon fields using MAGIC polymer gel, Gafchromic film, and Monte Carlo simulation. Applied Radiation and Isotopes. 2020 Dec 1; 166:109233.

- Nezhad ZA, Geraily G, **Parwaie W**, Zohari S. A novel investigation of the effect of different concentrations of methacrylic acid on the dose response of MAGAT gel dosimeter in intraoperative radiotherapy. Radiation Physics and Chemistry. 2020 Oct 7:109214.

Articles Presented in Seminars and Congresses

- Evaluation of breast size on heart and lung doses in breast cancer treatment with tangential fields in three-dimensional and conventional methods. (presented in Ninth International Congress of Breast Cancer. Iran 2014)
- Satayi Mokhtari S, Shabestani Monfared A, Arbabi K, Niksirat F, Ebrahimnejad Gorji K, Parwaie W. Measuring the Skyshine from Linear accelerator in Rajaee Oncology Hospital. Iranian Journal of Medical Physics. (Special Issue-12th. Iranian Congress of Medical Physics).

• Workshops Attended:

- How to publish a scientific journal article
- Application of optic and laser in medical
- SPSS
- Nano technology
- How to write a scientific journal article?
- How to edit a scientific journal article
- Research PROCEDURES
- Sample volume in health study
- Research workshop classes
- Peer-reviewed scientific articles