

Curriculum Vitae

Name: Safoora Nikzad

Email address: safura.nikzad@gmail.com, s.nikzad@umsha.ac.ir

Tel: +98-8138380572

ORCID ID: orcid.org/0000-0001-5156-4074

Google scholar: https://scholar.google.com/citations?user=8FyX3GsAAAAJ&hl=en

Experience:

September 2014– present: Professor assistant in Department of Medical Physics, Faculty of Medicine, Hamadan university of medical physics, Hamadan, Iran

June 2014–Present: Managing editor of the journal of Radiobiology (Isfahan University of Medical Science journal)

Education:

PhD: Medical Physics, Department of Medical Physics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran (2009 to 2014)

MSc: Medical Physics, Department of Medical Physics, Faculty of Medical Sciences, Esfahan University of Medical Sciences, Esfahan, Iran (2006-2009)

BSc: Physics, Department of Physics, Faculty of Basic Sciences, Esfahan University, Esfahan, Iran (2001-2005)

PhD Thesis:

An in-vitro and in-vivo assessment of the radiobiological effect of the time gap within each radiotherapy fractions in controlling cancer cells in the Balb/c and using the linear quadratic model for compensating it

Master Thesis:

Investigation of organ' dose (Thyroid, sternum, neck vertebra) in thyroid cancer patients under radioiodine therapy in two methods of TLD and MIRD by use of phantom.

Skills:

- ✓ Radiotherapy dosimetry systems
- ✓ Radiotherapy treatment planning
- ✓ Various cell lines culture and their preservations
- ✓ Conogenic assay, MTT assay and flowcytometry technique
- ✓ Different methods of forming tumors in mice
- ✓ Using nanoparticles in treatment of cell and animal's tumors

Basic Physics:

- ✓ Set up and use of different lasers

Research field of Interest:

- ✓ Dosimetry and treatment planning in radiotherapy clinics
- ✓ Assessment the effect of radiation in in-vivo and in-vitro environment

Relevant MSc and PhD Courses:

- ✓ Medical Physics/ J. Cameron
- ✓ Practical Radiation Protection & Applied Radiology/ S. B. Dowd
- ✓ Fundamentals of Radiation Dosimetry/ J. R. Greening
- ✓ Fundamentals of Detection & Dosimetry of ionizing Radiation/ M. H. Saffar
- ✓ Radiation Safety, Protection & Health Physics/ by many authors
- ✓ Optometric Instrumentation/ Some text related to subject
- ✓ Physics of Diagnostic Imaging/ Dowsett, Kenny & Johnston
- ✓ Radiobiology for the Radiologist/ E. J. Hall
- ✓ Diagnostic Ultrasound/ S. C. Bushong

- ✓ Diagnostic Ultrasound: Principles & Instruments/ Kremkau-- Hykes
- ✓ The principles of Monte Carlo calculations in medical physics/ Some text related to subject
- ✓ Principles of biomechanics and finite element/ Some text related to subject
- ✓ Basic physics and electronic principles of medical instruments/ Some text related to subject
- ✓ Laser, principles and its applications in medicine/ Some text related to subject
- ✓ The basic physics of MRI/ Bushberg
- ✓ Physics & Radiobiology of Nuclear Medicine/ G. B. Saha
- ✓ Bio Telemetry/ Some text related to subject
- ✓ The Physics of Radiation Therapy/ F. M. Khan

Offered Courses:

- ✓ *The Basic physics*
- ✓ *The proficiency physics*
- ✓ *Medical physics for medicine students(Basic physics of ultrasound, MRI, Laser, nuclear medicine)*
- ✓ *Medical physics for Pharmacy students(Basic physics of optic, Laser, physics of crystals, physics of fluid, nuclear medicine, physics of x-ray)*
- ✓ *The physics of radiation*
- ✓ *The biophysics*
- ✓ *Radiation Safety, Protection & Health Physics*
- ✓ *Fundamentals of Detection & Dosimetry of ionizing Radiation*
- ✓ *Physics of radiotherapy*

Seminars and Presentations:

1. Kheiri Manjili H, Mousavi S, Nikzad S, Aghai pour M. 1st National congress and workshop on Nanoscience and Nanotechnology (MY 16-17, 2013).The radio sensitivity effect of gold nano particles on the cells of breast Adeno carcinoma by the use of radiation (poster)
2. Hashemi B, Nikzad S, Zuhair MH, Mozdarani H. Effect of compensating radiation doses on F10B16 melanoma and 4T1 breast Adenocarcinoma survivals treated with prolonged delivery time. International Conference on recent Advanced in Health Sciences At Kuala Lampour Malaysia, 2014.

3. Maryam Pourkaveh, safora Nikzad, Karim Ghazikhanlu sani. Evaluation of Awareness Radiologists in Kermanshah Hospitals about of Digital Radiology and related systems. 32nd Iranian Congress of Radiology and 14th Iranian Congress of radiographic Science Association. 2016.
4. Safoora Nikzad, Farzaneh Allaveisi. Evaluating the Effect of Radiofrequency Radiation on the Survival of Human Normal and Embryonic kidney Cells in the Presence of AuNanoparticles. 2nd Iranian Nanomedicine Congress (INMC2016). 27-29 September 2016 in Zanjan, Iran with an oral presentation.
5. Farzaneh Allaveisi, Safoora Nikzad. Dosimetric evaluation of the dose to kidney in three dimensional conformal radiotherapy of the pancreas cancer: results of a comparative planning study using field-in-field, wedge based three-field, and four- box techniques. The first international clinical oncology congress. 10-12 November 2016 in Tehran, Iran. poster
6. Farzaneh Allaveisi, Safoora Nikzad. Radio biological evaluation of the 3d- conformal radiotherapy of the pancreas cancer: results of a comparative study between field-in-field technique versus the use of conventional wedges. The first international clinical oncology congress. 10-12 November 2016 in Tehran, Iran. poster

---

Publications:

I: Papers:

1. D.Shahbazi-Gahrouei, S.Nikzad et al .Determination of absorbed dose of organs (Thyroid, Sternum, Neck vertebra) in thyroid cancer patients following radioiodine therapy. Iran J Nucl Med 2009; 17(1): 27-33.

2. D.Shahbazi-Gahrouei, S.Nikzad . Investigation of organ dose (thyroid, sternum, neck vertebra) in thyroid cancer patients under radioiodine therapy by the use of MIRD method, Iran J Radiat Res 2011; 8(4):249-252.

3. Nikzad S, Hashemi B, Hasan Z S, Mozdarani Hossein. The cell survival of F10B16 melanoma and 4T1 breast adenocarcinoma irradiated to gamma radiation using the MTT assay based on two different calculation methods. J Biomed Phys Eng 2013; 3(2):29-36.

4. Kheiri H, Naderi-Manesh H, Mashhadikhan M, Ma'mani L, Nikzad S, mussawi S. The effect of iron- gold core shell magnetic nanoparticles on the sensitization of breast cancer cells to irradiation, Journal of Paramedical Sciences 2014;5(2): 85-90

5. Nikzad S, Hashemi B. MTT assay instead of the clonogenic assay in measuring the response of cells to ionizing radiation. Journal of radiobiology 2014;1(1):3-8

6. Nikzad S, Hashemi B, Mozdarani Hossein, Hasan Z S. The effect of delivering compensating doses on the survival of F10B16 melanoma and 4T1 breast adenocarcinoma treated with prolonged radiation delivery time. International journal of radiation research 2015;13(1): 31-38.

7. Ma'mani L, Nikzad S, Kheiri-manjili H, al-Mussawi S, Saeedi M, Askarlou S, Foroumadi A, Shafiee A. Curcumin-Loaded guanidine functionalized PEGylated I3ad mesoporous silica nanoparticles KIT-6: practical strategy for the breast cancer therapy. European Journal of Medicinal Chemistry2014: 83; 646-654.

8. Nikzad S, Baradaran M, Nasiri P. Dose-response modeling using MTT assay: a short review. Life Science Journal 2014;11(9): 432-437.

9. Nikzad S, Hashemi B, Hasan Z S, Mozdarani Hossein. Comparison of various theoretical methods on the effect of intermittent irradiation schedule. Journal of radiobiology 2014;1 (2): 23-27.

10. Musawi SA, Naderimanesh H , Hassan ZM, Yeganeh H, Nikzad S, Kheiri Manjili H, Construction of Polyurethane Polymeric-based Nano-carriers for Curcumin in Cancer Therapy, Journal of Medical Science: Pathobioligy 2015; 4:25-40.

11. Nikzad S. The effect of intermittent radiotherapy on the cells' survival. Journal of Radiobiology 2015; 2(1): 11-15.

12. Nikzad S, Hashemi B, Mahmoudi G. Baradaran ghahfarokhi M. Estimation of cell response in fractionation radiotherapy using different methods derived from linear quadratic model. Radiology and oncology: 49(4); 347-356.

13. Nikzad S, Hashemi B, Hasan ZS, Mozdarani H, Baradaran-Ghahfarokhi M , Amini P, The application of the linear quadratic model to compensate the effects of prolonged fraction delivery time on a Balb/C breast adenocarcinoma tumor: An in-vivo study. Journal of Radiation Biology: 92(2); 80-86.

14. Nikzad S, Hashemi B. Calculating the compensating dose in fractionation radiotherapy. journal of radiobiology 2015; 2(2):32-35.

15. Mahmoudi G, Nikzad S, Mehrpouyan M, Baradaran-Ghahfarokhi M, Sharafi SM, Moslehi M, Dashty A. Effects of prolonged radiofrequency radiation on kidney cells: An in-vitro study. Journal of Renal Injury Prevention. Impress

16. Nikzad S, Mahmoudi G, Amini P, Baradaran-Ghahfarokhi P, Vahdat-Moaddab A, Sharafi M, Hojaji-Najafabadi L, Hosseinzadeh A. Predictive Evaluation of the effects of radiofrequency radiation in the presence of gold nanoparticles for the treatment of renal cell carcinoma. Journal of Renal Injury Prevention 2017; 6(2):103-108.

17. Pourkaveh M, Nikzad S, Jabbari vesal N. Measuring the Entrance Surface Dose and Effective Dose of patients in radiology of Chest and Abdomen in Hamadan and comparison whit the international standard. Journal of Mazandaran University of medical sciences. Impress

References:

Dr. Bijan Hashemi, Department of Medical Physics, Faculty of Medical Sciences, Tarbiat Modares University, Al-Ahmad and Chamran Cross, Tehran 1411713116, Iran.

Phone: 98-21-82883892; Fax: 98-21-88006544;

E-mail: bhashemi@modares.ac.ir

Dr. Zuhair Mohammad Hassan , Department of Immunology, Faculty of Medical Sciences, Tarbiat Modares University , Al-Ahmad and Chamran Cross, Tehran 1411713116, Iran.

E-mail:hasan_zm@modares.ac.ir Phone: 98-21-82883565

Dr. Hossein Mozdarani , Department of Medical Genetics, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, Iran

Phone: 98-21-82883830 E-mail:mozdarah@modares.ac.ir

Dr.Dariyoush Shahbazi, Department of Medical Physics, Faculty of Medical Sciences, Isfahan University, Isfahan, Iran.

E-mail: shahbazi@med.mui.ac.ir

Dr.Parvaneh Shokrani, Department of Medical Physics, Faculty of Medical Sciences, Isfahan University, Isfahan, Iran.

E-mail: shokrani14@yahoo.com