Curriculum Vitae (2019)

Fereshteh Koosha

PhD of Medical Physics, Assistant Professor

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Academic Background

- 2012-2018 — Department of Medical Physics and Biomedical Engineering
  Tehran University of Medical Sciences, Tehran , Iran.
  Ph.D of Medical Physics

- 2008 to 2011 — Department of Medical Physics and Biomedical Engineering,
  Tehran University of Medical Sciences, Tehran, Iran
  M.Sc. of Medical Physics

- 2003 to 2007 — Department of Physics, Faculty of Basic sciences, Universityof
  Mazandaran , Mazandaran , Babolsar, Iran

  B.Sc of Physics

Fields of interest

- Cancer treatment , Radiotherapy (treatment planning, verification, dosimetry, image guided radiotherapy)

- Radiobiology, Radiosensitizer drugs (PARP inhibitors), DNA repair pathways , targeted radionuclides

Experiences and Computer skills

- Gel Electrophoresis
- Prokaryotic and Eukaryotic Cell Culture
- Pico Green assay
- Colony formation assay
- Western blot
- MTT assay
- Immunocytochemistry (Icc)
- Real time PCR
- Work with nuclear medicines
- Absolute and Relative dosimetry in water phantoms and human model phantoms in Imam khomeini hospital and Pars hospital ,Tehran,Iran
- Work with linear accelerators (varian and siemens) in Imam khomeini hospital and Pars hospital ,Tehran, Iran
- Work with treatment planning softwares (conformal radiotherapy)

- Monte carlo simulation (MCNP4C)
- Matlab software
- Explore DTI

Publications & Conferences

1. Ali Neshasteh-Riz, Narges Rezaei , Zohreh Mazaheri , **Fereshteh Koosha** , Mahmoud Hoormand. " The Combination Of Metformin And Disulfiram-Cu For Effective Radiosensitization On GBM Cells ". Cell J (Yakhteh) 22, no. 3 (2020).

2. A. Rezaeyan, S. R. Mahdavi, A. Nikoofar, M. Najafi, A. Amrae, **F. Koosha**, S. Cheraghi. "Evaluating the Effects of Radiation and Cisplatin-Based Chemotherapy on Sensorineural Hearing Loss in Patients with Head and Neck Cancer ". *IJRR* (2019)

3.
4. Hosseini, Vahid, Mehri Mirrahimi, Ali Shakeri-Zadeh, **Fereshteh Koosha**, Behafarid Ghalandari, Shayan Maleki, Ali Komeili, and S. Kamran Kamrava. "Multimodal cancer cell therapy using Au@ Fe2O3 core-shell nanoparticles in combination with photo-thermo-radiotherapy." *Photodiagnosis and photodynamic therapy* (2018).

5. Movahedi, Mohammad Mehdi, Alireza Mehdizadeh, **Fereshteh Koosha**, Neda Eslahi, Vahid Pirhajati Mahabadi, Habib Ghaznavi, and Ali Shakeri-Zadeh. "Investigating the photo-thermo-radiosensitization effects of folate-conjugated gold nanorods on KB nasopharyngeal carcinoma cells." *Photodiagnosis and photodynamic therapy* 24 (2018): 324-331.

6. Neshasteh-Riz, Ali, Zahra Balavandi, **Fereshteh Koosha**, Samira Eynali, Mahmood Hoormand, and Minoo Shahidi. "The use of β-elemene to enhance radio sensitization of A375 human melanoma cells." *Cell J (Yakhteh)* 21, no. 4 (2018).

7. Ghazikhanlou-Sani, Karim, Azizollah Rahimi, Maryam Poorkaveh, Samira Eynali, **Fereshteh Koosha**, and Mohsen Shoja. "Evaluation of the electromagnetic field intensity in operating rooms and estimation of occupational exposures of personnel." *Interventional Medicine and Applied Science*(2018): 1-6.

8. **Koosha Fereshteh**, et al. "The combination of A-966492 and Topotecan for effective radiosensitization on glioblastoma spheroids." *Biochemical and biophysical research communications* 491.4 (2017): 1092-1097.

9. Shahbazi-Gahrouei, Daryoush, Shahnaz Razavi, **Fereshteh Koosha**, and Marzieh Salimi. "Exposure of Extremely-Low Frequency (ELF) magnetic field may cause human cancer." *Acta Medica International* 4, no. 1 (2017): 32.

10. Neshasteh-Riz, Ali, Nazila Eyvazzadeh, **Fereshteh Koosha**, and Susan Cheraghi. "Comparison of DSB effects of the beta particles of iodine-131 and 6 MV X-ray at a dose of 2 Gy in the presence of 2-Methoxyestradiol, IUdR, and TPT in glioblastoma spheroids." *Radiation Physics and Chemistry*131 (2017): 41-45.

11. Neshasteh-Riz, Ali, **Fereshteh Koosha**, Afshin Mohsenifar, and Seyed Rabee Mahdavi. "DNA damage induced in glioblastoma cells by I-131: a comparison between experimental data and Monte Carlo simulation." *Cell Journal (Yakhteh)* 14, no. 1 (2012): 25.

12. Evaluation of organs at risk dose in the left breast IOERT procedures with and with out shielding disc using monte carlo simulation. Ghazaleh Mansourian, Ali Neshastehriz, Mostafa Robatjazi, Fershteh Koosha, Reza Paydar. **12 th Iranian congress in medical physics, 19-20 July 2018 , Shahid Beheshti University of Medical Sciences**

13. Presentation. *DNA Damage Induced in Glioblastoma Cells by I-131: A Comparison between Experimental Data and Monte Carlo Simulation*. **IUPESM 2015,7th -12thjune ,Toronto ,Canada.**

14. Presentation. Determination of relative biological effectiveness (RBE) in cultured Glioblastoma spheroids with comparison of beta particle emitted from I131 and Co60 gamma rays. **9th Iranian congress in medical physics, 18-19 May 2010, Iran University of Medical Sciences**

15. Presentation. Determination of direct damage in DNA, by I-131 and comparing to Monte Carlo simulation in Glioblastoma cells in monolayer cell culture**. 9th Iranian congress in medical physics, 18-19 May 2010, Iran University of Medical Sciences**

16. Presentation in the 1st MEFOMP International Conference of Medical Physics, **Shiraz, Iran. November 2-4, 2011**. *DNA Damage Induced in Glioblastoma Cells by I-131: A Comparison between Experimental Data and Monte Carlo Simulation.*