## Curriculum Vitae

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## Arash Safari, Ph.D.

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#### **EDUCATIONAL SUMMARY**

Feb 2016 -Dec 2019

Ph.D. (Medical Physics) Isfahan University of Medical Sciences, Isfahan, Iran

**M.Sc.** (**Medical Physics**) Shiraz University of Medical Sciences, Shiraz, Iran *Oct* 2011 -Sep 2014

**B.Sc. (Physics)** *Oct.* 2004-2008

Razi University, Kermanshah, Iran

**Diploma, Mathematics** Kermanshah, Iran *Jun.* 2002

#### RESEARCH SUMMARY

Ph.D. Thesis

M.Sc. Thesis

 Synthesis and characterization of iron oxide-gold core-shell nanoparticles and their photo and radio sensitization effect on nasopharyngeal cancer cell (KB)

> Simulation and designing of nano-material—based multi-layered lead-free shields and optimizing radiation attenuation of these shields in diagnostic Xray photons energy ranges.

#### JOURNAL PAPERS

- Safari A, Sarikhani A, Shahbazi-Gahrouei D, Alamzadeh Z, Beik J, Dezfuli AS, et al. Optimal scheduling of the nanoparticle-mediated cancer photo-thermo-radiotherapy. Photodiagnosis and Photodynamic Therapy. 2020:102061.
- Movahedi, M., Tavakoli Golpayegani, A., Safari, A., Amani, S. Effects of Short-term Exposure to Electromagnetic Fields Emitted by 3G and 4G Mobile Phones on Reaction Time and Short-term Memory. Iranian Journal of Medical Physics, 2019; 16(3): 250-254.
- 2018 R Yahyapour, A Salajegheh, A Safari, S Abbasi, P Amini, A Rezaeyan, A Amraee, M Najafi. "Radiation-induced Non-targeted Effect and Carcinogenesis; Implications in Clinical Radiotherapy". J Biomed Phys Eng 2018;
- **2014** Safari A, Mortazavi SMJ, H Mozdarani. "RadBioStat an Educational Software for Teaching the Random Nature of Cell Killing". J Biomed Phys Eng 2014; 4(1)

MM Movvahedi, A Tavakkoli-Golpayegani, S A R. Mortazavi, M Haghani, Z Razi, MB Shojaie-fard, M Zare, E Mina, L Mansourabadi, Nazari-Jahromi, A Safari, N Shokrpour, S. M. J. Mortazavi "Does exposure to GSM 900 MHz mobile phone radiation affect short-term memory of elementary school students?", Journal of pediatric neurosciences. 2014;9(2):121.

#### RESEARCH PROJECTS CONDUCTED

The Center for Research on Protection against Ionizing and Non-Ionizing Radiation:

Effect of short-term exposure to electromagnetic fields emitted by 3-4G and GSM mobile phone on reaction time and short memory.

The high electric fields generated by some common energy saving compact fluorescent lamps.

How efficient are multilayered nano-sized lead-free kilovoltage X-ray shields?

Effects of exposure to radiation from laser and diagnostic dental X-rays on sub leakage of amalgam filling.

The effect of electromagnetic fields in the range of radio frequency waves on the accuracy of medical thermometers readings.

# CLINICAL LAB & WORK EXPERIENCE

Diagnostic nanoparticles and
radiobiology laboratory
(2018- currently)

Nanoparticle Synthesis and application in cancer diagnosis and treatment, Cell culture, Handling laboratory animal

Sayed-al-shohada cancer center (2017- 2018)

3D Treatment Planning, QC, Dosimetry

The Center for Research on Protection against Ionizing and Non-Ionizing Radiation (2012-2016)

Researcher

#### **HONORS & AWARDS**

- 2014 Top student in M.Sc. degree.
- 2014 Developing RadBioStat software for learning target theory in Radibiology
- 2014 Shooting Championship bronze medalist in national sports Olympiad medical sciences university's students

#### CONFERENCE POSTERS

- 2014 Safari A, Mortazavi SMJ .et al "optimizing radiation attenuation of nano-material—based multi-layered lead-free shields in diagnostic X-ray photons energy ranges." 11<sup>th</sup> Iranian conference of Medical Physics, Tehran, Iran.
- SMJ Mortazavi, AR Mehdizadeh, MA Mosleh-Shirazi, A Safari .et al "How Efficient are Multilayered Nano-Sized Lead-Free Kilovoltage X-Ray Shields?", accepted by the 41st Annual Meeting of the European Radiation Research Society for a poster presentation, September 19, 2014, Rhodes, Greece.
- Mortazavi SMJ, Safari A, Haghani M''The High Electric Fields Generated by Some Common Energy Saving Compact Fluorescent Lamps''. Presented in Second Non Ionizing Radiation Safety Conference, Shiraz, Iran.

#### TEACHING EXPERIENCE

Radiation Physics, Medical Physics, Dosimetery, Radiation Protection, Physics of Diagnostic Radiology for Paramedical Students, Medical Physics Lab for Medical and Paramedical Students

Instructor," Basics of Medical Physics" Shiraz University of Medical Sciences

Instructor," Medical Physics Lab". For Medical and Dentistry Student Shiraz and Isfahan University of Medical Sciences

Instructor," Medical Physics Lab" For environmental health engineering Student. Isfahan University of Medical Sciences

Instructor," Fundamentals of Physics ".

#### **COMPUTER SKILLS**

**Mathematical Package** 

MATLAB, SPSS

**Medical Physics** 

EGS.nrc, MCNP, Treatment planning systems,

**Practical** 

Graphic design softwares, EndNote, Mendeley

## ADDITIONAL EXPERIENCE, SKILLS& MEMBERSHIP

QC (Diagnostic radiology and radiotherapy equipments)
3D Treatment Planning, Radiation Protection & Dosimetry

- -Member of Radiology Department, School of Paramedical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran
- -Member of Ionizing and Non-Ionizing Radiation Protection Research Center (INIRPRC), Shiraz University of Medical Sciences
- -International Organization of Medical Physics (IOMP)
- -American Association of Physicists in Medicine (AAPM)
- Iranian Association of Medical Physicists (IAMP)

### ADMINISTRATIVE EXPERIENCE

### Executive Committee Member of:

- 1<sup>st</sup> MEFOMP International Conference of Medical Physics, Shiraz, Iran.
- 2<sup>nd</sup> Non-Ionization Radiation Safety Conference, Shiraz, Iran.
- 11th Iranian conference of Medical Physics, Tehran, Iran.

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