



In the Name of God

***Ministry of Health, Treatment and Medical Education
Iran Medical Researchers Directory***

CURRICULUM VITAE



PERSONAL INFORMATION

Name: Mostafa

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Webpage: <https://scholar.google.no/citations?hl=en&pli=1&user=SUy6EHUAAAAJ>

EDUCATIONAL BACKGROUND

PhD in Medical Physics

MSc. in Medical Physics

BSc. in Radiology

DISSERTATIONS

PhD Thesis Title:

- ✓ Monte Carlo simulation & measurement of in-vivo dosimetric parameters for effectively absorbed dose uniformity in IORT

MSc Thesis Title:

- ✓ A feasibility study of the application of MRSI in target delineation of prostate cancer radiation therapy

Awards and Ranks

- ✓ Achieving 9th position in admission exam entering MSc degree program in IRAN, i.e. 9th among participants 2500
- ✓ Achieving 5th position in admission exam entering Ph.D. degree program in IRAN, i.e. 5th among participants 250

TEACHING EXPERIENCES

I: Teaching Experiences I

- ✓ Medical Physics

II: Teaching Experiences II

- ✓ Medical Imaging (MRI, CT, Diagnostic Radiology, Ultrasound)

III: Teaching Experiences III

- ✓ Radiotherapy Physics, Dosimetry

IV: Teaching Experiences IV

- ✓ Monte Carlo Simulation

PROFESSIONAL MEMBERSHIP

- ✓ Member of Medical Physics & Radiological Sciences Department, Faculty of Allied in Medicine, Sabzevar University of Medical Sciences. 2017
- ✓ Manuscript Reviewer of:
 - *Journal of Applied Clinical Medical Physicist*
 - *Australasian Physical and Engineering Science in Medicine journal*
 - *Iranian Journal of Medical Physics*

- *Frontiers in Biomedical Technologies journal*
- *International Journal of Radiation Research*
- *Payavard Salamat journal*

RESEARCH FIELDS OF INTERESTS

- ✓ Research Field I: *Medical Imaging in Radiotherapy Treatment Planning*
- ✓ Research Field II: *Monte Carlo Simulation and Radiation Dosimetry*

CONFERENCE PARTICIPATION

1. **M.Robatjazi**, HR.Baghani, P.Porohan, SR.Mahdavi; *Optimization of tangential fields arrangement in the breast cancer 3D conformal radiation therapy*, 12th Iranian Congress of Medical Physics, 2018, Tehran.
2. **M.Robatjazi**, G.Mansourian, HR.Baghani, A.Neshastehriz; *Assessment of organ at risk dose in breast cancer intraoperative electron beam radiation therapy using Monte Carlo simulation*, World Congress on Medical Physics and Biomedical Engineering 2018, Prague
3. MR.Hosseini Aghdam, HR.Baghani, **M.Robatjazi**, SR.Mahdavi; *Monte Carlo based determination of radiation leakage dose around a dedicated IOERT accelerator*; World Congress on Medical Physics and Biomedical Engineering 2018, Prague
4. HR. Baghani, ME. Akbar, SR. Mahdavi, SMR. Aghamiri, HR. Mirzaei, **M.Robatjazi**, N.Naffisi; *Development of a postoperative image-based treatment planning system for breast IOERT*; *Radiotherapy & Oncology (the green journal)* (2016) 119, S405-S406
5. **M.Robatjazi**, SR.Mahdavi, HR.Baghani, HR.Baghani; (2017). *Evaluation of parallel plate ionization chamber response in high dose per pulse IORT electron beam using Monte Carlo simulation*. 2nd Optimization in Radiation Therapy, Mashhad.
6. **M.Robatjazi**, SR.Mahdavi, AR.Nikoofar, B.Bolouri; (2011). *Use of noninvasive molecular imaging for target definition in treatment planning of prostate radiotherapy*. 1st MEFOMP international conference of Medical Physics, Shiraz University of Medical Sciences.
7. **M.Robatjazi**, SR.Mahdavi, A.Takavar; (2015). *Evaluation of ion chamber response in high dose per pulse electron beams of IORT accelerator using EGSnrc Monte Carlo code*. IUPESM2015 international conference of Medical Physics, Toronto, Canada

8. HR.Baghani, SMR.Aghamiri, **M.Robatjazi**, SR.Mahdavi, ME. Akbari; *Breast Intraoperative Radiation Therapy; Setup verification and in-vivo dosimetry*. 1th International Breast cancer. (2015). Tehran.
9. HR.Baghani, SMR.Aghamiri, **M.Robatjazi**, SR.Mahdavi; *Intraoperative Radiation Therapy for Breast Cancer: a Physical and Clinical Review*; 6th BCRC, Tehran.
10. HR.Baghani, **M.Robatjazi**, SR.Mahdavi, SMR.Aghamiri, A.Mostaar; *Development and Performance Evaluation of a Film Dosimetry System Based on EBT2 Radiochromic Film for Breast Intraoperative Radiotherapy Verification*. 6th BCRC, Tehran.
11. **M.Robatjazi**, SR.Mahdavi, A.Takavar, HR. Baghani, MR Hosiniaghdam, K.Tanha; *Commissioning of dedicated IORT linac (LIAC) using Monte Carlo simulation*, 11Th Iranian Congress of Medical Physics, Tehran
12.

PUBLICATIONS

1. **M.Robatjazi**, SR.Mahdavi, AR.Nikoofar, B.Bolouri, HR.Baghani; *Optimization of Clinical Target Volume Delineation Using Magnetic Resonance Spectroscopic Imaging (MRSI) in 3D Conformal Radiotherapy of Prostate Cancer*; International Journal of Radiation Research. (2014) 12 (4), 303
2. **M.Robatjazi**, SR.Mahdavi, A.Takavar, HR.Baghani; *Application of Gafchromic EBT2 film for intraoperative radiation therapy quality assurance*; Physica Medica. (2015) 31 (3), 314-319
3. HR.Baghani, SMR.Aghamiri, SR.Mahdavi, **M.Robatjazi**, A.Rahim Zadeh, ME.Akbari, HR. Mirzaei, N.Nafisi,...; *Dosimetric evaluation of Gafchromic EBT2 film for breast intraoperative electron radiotherapy verification*; Physica Medica. (2015) 31 (1), 37-42
4. **M.Robatjazi**, AM.Pashazadeh, H.Hassan Karimi, M.Assadi, *Molecular imaging with Magnetic Resonance Spectroscopy*; Iranian South Medical Journal. (2015) 18 (1), 210-221
5. HR.Baghani, SMR.Aghamiri, **M.Robatjazi**, V.Lohrabi; *Monte Carlo determination of dosimetric parameters of a new 125I brachytherapy source according to TG-43(U1) protocol*; Archives of Iranian Medicine. (2016) 19 (3)
6. Z.Rahimzade Yekta, SR.Mahdavi, HR.Baghani, **M.Robatjazi**, A.Mostaar, HR. Mirzaie, D.Sardari, ME.Akbari and N.Nafisia; *In vivo dosimetry using radiochromic films (EBT-2) during intraoperative radiotherapy*; Journal of Radiotherapy in Practice. (2016) 15 (4), 378-384
7. M.Mousavi, S.Khoei, MR.Ghasemi, S.Eynali, **M.Robatjazi**, R.Irajirad; *Radiosensitization effects of pegylated gold nanoparticles under irradiation of high energy electrons*; International Journal of Radiation Biology. (2017) 93 (2), 214-221

8. M.Molazadeh, AR.Shirazi, **M.Robatjazi**, Gh.Gerayoli. ; *Dosimetric characteristics of Lina Tech DMLC H multi-leaf collimator: Monte Carlo simulation and experimental study*; Journal of Applied Clinical Medical Physics. (2017) 18 (2), 113-124
9. **M.Robatjazi**, K.Tanha, SR.Mahdavi, HR.Baghani, HR.Mirzaee, M.Mousavi, N.Nafissi, ME.Akbari; *Monte Carlo simulation of electron beams produced by LIAC Intraoperative Radiation Therapy Accelerator*; Journal of Biomedical Physics & Engineering. (2018) 8 (1 Mar)
10. **M.Robatjazi**, SR.Mahdavi, HR.Baghani, G.Filici, *Evaluation of dosimetric properties of shielding disk used in intraoperative electron radiotherapy: A Monte Carlo study*; Applied Radiation and Isotopes. (2018) 139, 107-113.
11. HR.Baghani, **M.Robatjazi**, SR.Mahdavi, SR Hosini Aghdam, *Evaluating the performance characteristics of some ion chamber dosimeters in high dose per pulse intraoperative electron beam radiation therapy*; Physica Medica. (2019) 58, 81-89.
12. HR.Baghani, **M.Robatjazi**, SR.Mahdavi, N.Nafissi, ME.Akbari; *Breast intraoperative electron radiotherapy: Image-based setup verification and in-vivo dosimetry*; Physica Medica. (2019) 60, 37-43.
13. HR.Baghani, SR Hosini Aghdam, **M.Robatjazi**, SR.Mahdavi; *Monte Carlo-based determination of radiation leakage dose around a dedicated IOERT accelerator*; Radiation and Environmental Biophysics. (2019) 58(2), 263-276
14. HR.Baghani, **M.Robatjazi**, SR.Mahdavi; *Performance evaluation and secondary monitor unit checkout for a dedicated accelerator in intraoperative electron radiotherapy*; Radiation Physics and Chemistry. (2019) 163, 11-17

WORKSHOPS

- ✓ **Lecturer**; Workshop on “Intraoperative Radiation Therapy”, 11th Iranian congress of Medical Physics, *Tehran, Iran, November 2014*.
- ✓ **Lecturer**; Workshop on “How to purchase Cardiac CT Scanner”, 30th Iranian congress of Radiology, *Tehran, Iran, November 2013*.
- ✓ **Attended**; Workshop on “Intensity Modulated Radiation Therapy techniques” 11th Iranian congress of Medical Physics, *Tehran, Iran, November 2014*.
- ✓ **Attended**; Workshop on “Photon Dosimetry” 1th Iranian Medical Physics Dosimetry Series, *Babolsar, Iran, September 2013*.
- ✓ **Attended**; Workshop on “How to write and get published” Springer , *Tehran, Iran, September 2013*.
- ✓ ...

EXPERIENCE

- **Computer Skills**

- Operating Systems: Windows, Linux

Software:

- ENDNOTE, Statistical analysis software (SPSS)
- Microsoft office (Word, Power point, Excel)
- MATLAB programming
- C++ and Python programming
- **Scientific and Special Skills:**
- MRI and Advanced technique on MRI (MRS, DTI, DWI...)
- Cardiac CT scan
- Radiotherapy treatment planning
- IOeRT Dosimetry
- Relative and Absolute Dosimetry in RT
- Monte Carlo Simulation (egsnrc, egsC++)