



Milad Enferadi

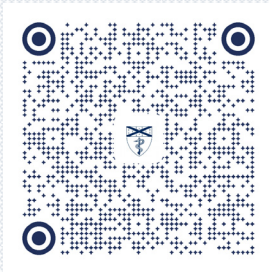


Department of Radiology and
Biomedical Imaging, Yale
School of Medicine, New
Haven, CT 06520-8048

milad.enferadi@yale.edu

milad.enferadi@ynhh.org

+1 (904) 884-0847



Education:

- 2025 Medical Physics Residency, Department of Radiology at Yale School of Medicine
- 2023-2024 CAMPEP Accredited Certificate in Medical Physics, Harvard Medical School
- 2018-2020 Accredited Ph.D. in Medical Physics by Iranian Ministry of Health and Medical Education. *Additional Courses in Department of Medical Physics, Iran University of Medical Sciences (IUMS).*
- 2013-2018 Ph.D. in Clinical Medical Sciences, Department of Medical Imaging and Radiological Sciences, Chang Gung University (CGU), Taiwan
[Thesis title: *Radiosensitizing effect of ultrasmall GNP-PEG-cRGD in ALTS1C1 tumor model by proton irradiation*].
- 2008-2011 M.Sc. in Nuclear Engineering-Medical Radiation Engineering, IAU, Science and Research Branch, Tehran, Iran
[Thesis title: *Study and Production of the Auger Emitter ¹¹⁹Sb-Bleomycin for Targeted Radionuclide Therapy of Micrometastases and Small Tumors*].
- 2004-2008 B.Sc. in Medical Radiation Engineering, IAU, Science and Research Branch, Tehran, Iran

Professional Experience:

- 2024-25 Associate Research Scientist in Department of Radiology at Yale School of Medicine
- 2023-24 Postdoctoral Associate in Department of Radiology at Yale School of Medicine
- 2022-23 Research Trainee in Department of Radiology at Mayo Clinic Florida
- 2018-22 Research Assistant in Research Center for Nuclear Medicine, Tehran University of Medical Sciences (TUMS), Iran
- 2021-22 Research Assistant in Department of Nuclear Medicine at University Hospital Salzburg, Austria (Remotely)
- 2018-21 Research Assistant in Department of Medical Physics, Iran University of Medical Sciences
- 2015-17 Ph.D. Candidate Researcher at Radiochemistry Lab., Chang Gung University, Taiwan
- 2013-16 Ph.D. Student Researcher at CGMH Proton and Radiation Therapy Center, Taiwan
- 2008-12 Graduate Student Researcher at IAU, Science and Research Branch, Tehran, Iran

Research Skills:

- Clinical nuclear medicine (PET/CT, Internal dosimetry)
- Clinical ⁹⁰Y radioembolization dosimetry (Simplicit⁹⁰Y™)
- PET radiopharmaceutical production with modules and manipulators
- Radiation biology of HCC and GBM (*in vivo* and *in vitro*)
- Radiation dosimetry (MCNP and GATE codes)
- Artificial intelligence in radiology (Radiomics, ML, and DL)
- Biostatistics (GraphPad, OriginLab)

Clinical studies:

- 2023-2025 ^{11}C -M503 for PET Imaging of Alpha-synuclein in Parkinson's Disease
2024-2025 ^{18}F -FBFP for PET Imaging of Sigma1 Receptors in Neurodegenerative Disease
2024-2025 cGMP Manufacturing of Radiopharmaceuticals under FDA regulations (e.g., ^{18}F -MK6240, ^{18}F -FPEP, ^{18}F -SDM8, ^{11}C -EKAB, ^{11}C -FLB, ^{11}C -OMAR, ^{11}C -PBR, ^{11}C -PIB, ^{11}C -Raclopride)

Clinical Trainings:

- 2013-2015 Radiation therapy internship at CGMH Proton and Radiation Therapy Center, Taiwan
2019-2022 Nuclear medicine internship in Research Center for Nuclear Medicine, TUMS, Iran
2022-2023 Radioembolization dosimetry training at Mayo Clinic Florida

Preclinical Experience:

- 2007-2010 Diagnostic radiotracer production in AMIRS Medical Cyclotron, Karaj, Iran
2010-2012 Dosimetry of Ho-166, and Pd-103 Brachytherapy seeds at IAU, Iran
2013-2017 Radiation biology of proton therapy in liver and brain tumors at CGMH, Taiwan
2015-2017 Gold nanoparticles for dose enhancement in radiation therapy at CGU/CGMH, Taiwan
2018-2020 AI in medical imaging for breast and brain tumors at IUMS, Iran
2018-2022 Internal dosimetry in radiotheranostics at TUMS, Iran
2022-2024 Development of PET radiotracers for molecular imaging of brain disorders at Yale Radiology

Teaching Experience:

- 2019-2022 TA for Ph.D./M.Sc. project courses at Tehran University of Medical Sciences
2018-2023 Supervision of M.Sc. and Ph.D. students at Iran University of Medical Sciences

Research Interests:

- Clinical and Pre-Clinical Nuclear Medicine (PET/CT, SPECT/CT, PET/MR, and Radiotheranostics)
- AI in Medical Imaging
- Interventional Radiology (Radioembolization and Ablation)
- Radiation Physics and Dosimetry in Oncology
- Nanomedicine in Radiation Oncology
- Cancer Biology

Member of Professional Organizations

1. **AAPM:** *American Association of Physicists in Medicine*
2. **RSNA:** *Radiological Society of North America*

Journal Reviewer:

- ⊙ Cancers
- ⊙ Computers in Medicine and Biology
- ⊙ European Journal of Radiology
- ⊙ International Journal of Molecular Sciences
- ⊙ Medical Hypotheses
- ⊙ Medicina
- ⊙ Physica Medica

Textbook Publication:

1. **Milad Enferadi**, Mahdi Sadeghi, Ameneh Ghorbani. [Radioisotopes in Medicine](#) (Persian Language). North Khorasan University of Medical Sciences. 2012, ISBN: 978-964-504-163-0.
2. **Milad Enferadi**, Mahdi Sadeghi, Parissa Pilvaar. [Cellular Effects of Ionizing Radiation Exposure](#) (Persian Language). North Khorasan University of Medical Sciences. 2012, ISBN: 978-964-504-169-2.

Publications

Radiation Biology:

1. **Milad Enferadi**. Can nocturnal sleep enhance radiation therapy efficiency? [Medical Hypotheses](#) 176 (2023) 111083
2. Anahita Movahedi, Mojtaba Mostajaboddavati, **Milad Enferadi**. Association of telomere length with chronic exposure to ionizing radiation among inhabitants of natural high background radiation areas of Ramsar, Iran. [International Journal of radiation Biology](#) 95 (2019) 8:1113-1121.
3. **Milad Enferadi**, Sheng-Yung Fu, Ji-Hong Hong, Chuan-Jong Tung, Shiao-Pyng Wey, Mahdi Sadeghi. Radiosensitization of ultrasmall GNP-PEG-cRGDFK in ALTS1C1 exposed to therapeutic protons and kilovoltage and megavoltage photons. [International Journal of radiation Biology](#) 94 (2018), 2 124–136.

AI in Medical Imaging:

1. Mahdie Jajroudi, Hossein Jamalirad, **Milad Enferadi**, et al. A Quantitative Approach to Predict Therapeutic Response in Hodgkin's Lymphoma Using ^{18}F FDG PET/CT. [Journal of Medical and Biological Engineering](#). 45, 187–197 (2025).
2. Mahdie Jajroudi, **Milad Enferadi**, Zahra Bagherpour, Reza Reiazi. Association rule mining-based radiomics in breast cancer diagnosis, [Iranian Journal of Medical Physics](#) (2024) 21, 2:113-120.
3. Zahra Bagherpour, **Milad Enferadi**, Reza Reiazi, S, Rabi Mahdavi. Radiomics in IOERT of Unilateral Breast Cancer as a biological dosimetry. [Iranian Journal of Medical Physics](#) 19 (2022) 184–189.
4. Mahdie Jajroudi, **Milad Enferadi**, Reza Reiazi. MRI-based machine learning for determining quantitative and qualitative characteristics affecting the survival of glioblastoma multiforme. [Magnetic Resonance Imaging](#) 85 (2022) 222–227.

Radiation therapy/Radiation Physics:

1. **Milad Enferadi**, Saber Sarbazvatan, Mahdi Sadeghi, Ji-Hong Hong, Chuan-Jong Tung, Shiao-Pyng Wey. Nuclear reaction cross sections for proton therapy applications. [Journal of Radioanalytical and Nuclear](#)

Chemistry. 314 (2017) 1207–1235

2. Hamed Hosseini, **Milad Enferadi**, and Mahdi Sadeghi Dosimetric aspects of ^{166}Ho brachytherapy biodegradable glass seed. *Applied Radiation and Isotope* 73 (2013) 109–115
3. Pooneh Saidi, Mahdi Sadeghi, **Milad Enferadi**: Investigation of palladium-103 production and ^{103}Pd brachytherapy seed preparation. *Annals of Nuclear Energy* 41 (2012) 97–103
4. **Milad Enferadi**, Mahdi Sadeghi: Radiation Therapy in the Early 21st Century: Technological Advances. *Current Cancer Therapy Reviews* 7 (2011) 303–318
5. Mahdi Sadeghi, **Milad Enferadi**, Alireza Shirazi: External and Internal Radiation Therapy: Past and Future Directions. *Journal of Cancer Research and Therapeutics* 6 (2010) 239

Nuclear Medicine:

1. Sepideh Barati, **Milad Enferadi**, Parham Geramifar. The effect of magnetic field strength on shine-through artifact in integrated PET/MR systems: a GATE Monte Carlo study. *Medical Physics* 48 (2021) 7712–7724.
2. Mahdi Sadeghi, **Milad Enferadi**: Accelerator production of the positron emitter zirconium-89. *Annals of Nuclear Energy* 41 (2012) 97–10.
3. **Milad Enferadi**, Mahdi Sadeghi: Nuclear data for the cyclotron production of ^{117}Sb and ^{90}Nb . *Chinese Physics C* 35(2011) 1–7.
4. **Milad Enferadi**, Mahdi Sadeghi: ^{122}Sb - a potential radiotracer: Evaluation of cyclotron production via novel routes. *Nuclear Technology & Radiation Protection* 26 (2011) 58-63
5. **Milad Enferadi**, Mahdi Sadeghi and Fatemeh Bolourinovin: Accelerator production and nuclear aspects of ^{88}Y : an efficient radiotracer. *Nuclear Technology & Radiation Protection* 26(2011) 201-208
6. Mahdi Sadeghi, **Milad Enferadi**, Hojjat Nadi: Study of the cyclotron production of ^{172}Lu : An excellent radiotracer. *Journal of Radioanalytical and Nuclear Chemistry* 286 (2010) 259–263
7. Mahdi Sadeghi, **Milad Enferadi**: Production and radiochemical separation of no-carrier-added ^{88}Y by liquid–liquid extraction. *Radiochemistry* 53 (2011) 539–544
8. **Milad Enferadi**, Mahdi Sadeghi, Mohammad Ensaf: Cyclotron production of $^{101}\text{Pd}/^{101\text{m}}\text{Rh}$ radionuclide generator for radioimmunotherapy. *Kerntchnik* 76 (2011) 131-135

9. **Milad Enferadi**, Mahdi Sadeghi, and Hojjat Nadi: ^{72}As - a powerful positron emitter for immunoimaging and receptor mapping: Study of the cyclotron production. *Radiochemistry* 53 (2011) 407–410
10. Mahdi Sadeghi, **Milad Enferadi**, Hojjat Nadi: A novel method for the cyclotron production no-carrier-added $^{93\text{m}}\text{Mo}$ for nuclear medicine. *Journal of Radioanalytical and Nuclear Chemistry* 286 (2010) 141–144
11. Mahdi Sadeghi, **Milad Enferadi**, Nuclear model calculations on the production of ^{119}Sb via various nuclear reactions. *Annals of Nuclear Energy* 38 (2011) 825–834
12. Mahdi Sadeghi, **Milad Enferadi**, Parvin Sarabadani: Cyclotron production ^{122}Sb for the studies of environmental pollution. *Journal of Radioanalytical and Nuclear Chemistry* 287 (2011) 585–589
13. Mahdi Sadeghi, **Milad Enferadi**: ^{124}I production for PET imaging at a cyclotron. *Kerntechnik* 76 (2012) no. 1 45-59
14. Mahdi Sadeghi, MR Aboudzadeh, **Milad Enferadi**, Parvin Sarabadani: Targetry and radiochemistry for no-carrier-added production of $^{117,118\text{m},119,120\text{m},122}\text{Sb}$. *NUKLEONIKA* 56 (2011) 17–24
15. Hojjat Nadi, Mahdi Sadeghi, **Milad Enferadi**, and Parvin Sarabadani: Cyclotron production of ^{169}Yb : A potential radiolanthanide for brachytherapy. *Journal of Radioanalytical and Nuclear Chemistry* 289 (2011) 361-365
16. Mahdi Sadeghi, **Milad Enferadi**, and Hojjat Nadi: ^{45}Ti , a candidate for positron emission tomography: Study of the cyclotron production. *Radiochemistry* 53 (2011) 402–407
17. Mahdi Sadeghi, Ali Ghanbarzadeh, **Milad Enferadi**: Nuclear data for cyclotron production of $^{114\text{m}}\text{In}/^{114}\text{In}$ and $^{140}\text{Nd}/^{140}\text{Pr}$ used in gamma camera monitoring, RIT, ERT and PET. *Kerntechnik* 75 (2010) 363–368
18. Mahdi Sadeghi, **Milad Enferadi**, Morteza Aref: Nuclear data for the cyclotron production of ^{66}Ga , ^{86}Y , ^{76}Br , ^{64}Cu and ^{43}Sc in PET imaging. *NUKLEONIKA* 55 (2010) 293–302
19. Mahdi Sadeghi, **Milad Enferadi**: Nuclear Model Calculations on the Production of Auger Emitter ^{165}Er for Targeted Radionuclide Therapy. *Journal of Modern Physics* (2010) 1(04):217-22