Curriculum Vitae Jalil Pirayesh Islamian

Professor of Medical Physics

Gender: Male
Nationality: Iranian
Marital Status: Married

Children: 0

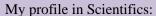
Date of Birth: 20/02/1967 **Place of Birth:** Tabriz, Iran

Languages: Persian

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http://medfac.tbzmed.ac.ir/?mid=85&ID=4&BasesID=3

https://tbzmed.academia.edu/jalilpirayesh https://isid.research.ac.ir/Jalil_PirayeshIslamian http://www.researcherid.com/rid/G-1341-2013

https://www.researchgate.net/profile/Jalil_Pirayesh_Islamian

 $\underline{https://www.scopus.com/authid/detail.uri?authorId=56989755400}$

 $\underline{https://scholar.google.com/citations?user=CnSGYKwAAAAJ\&hl=en}$

https://www.semanticscholar.org/author/J.-Pirayesh-Islamian/5953335

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https://www.linkedin.com/in/jalil-pirayesh-002b4353

https://www.pubfacts.com/manage/profile/Jalil+Pirayesh+Islamian

https://www.growkudos.com/profile/jalil pirayesh islamian

Administrative Posts

2014: Education Vice Chancellor of Medicine Faculty
Start Date: 2017/10/04 Finish Date: 2019/10/01
2014: Head of the Department of Medical Physics
Start Date: 2014/06/30 Finish Date: 2022/06/29

2014: Director of Medical Physics LaboratoriesStart Date: 2014/07/11 Finish Date: to be continued

2011 - Director of Radiobiology Laboratory

Place: Faculty of Medicine – Tabriz University of Medical Sciences

Start Date: 2011/07/26 Finish Date: 2013/07/26

2002 - Attendant of dissertation office

Place: Faculty of Medicine - Tabriz University of Medical Sciences

Start Date: 2002/06/20 Finish Date: 2005/02/15



Thesis

Ph.D. Thesis: Monte Carlo simulation of single photon emission tomography imaging system and

assessment of parameters affecting image quality **Supervisor:** Prof. Mohammad Taghi Bahreyni Toossi

MSc. Thesis: Study on the effect of radiotherapy on the karyotype of cancer patients

Supervisor: Prof. Mohammad Ali Hossainpour Feizi

Awards

2022 A Sabbatical scholarship in Lund University, Lund, Sweden.

2018 Premier head of basic science departments of Tabriz Medical Sciences University, Iran.

2017 A Sabbatical scholarship in Lund University, Lund, Sweden.

2016 Premier researcher in basic sciences members of medicine faculty, TBZMED, Iran.

2016 Premier head of basic science departments of Tabriz Medical Sciences University, Iran.

2010 A complementary scholarship of PhD course in Lund University, Lund, Sweden.

Work History

1996- To be continued: Scientific board Member of Tabriz University of Medical Sciences

Academic Positions

2020- To be continued: Professor of Medical Physics

2015- 2020: Associate Professor of Medical Physics

2010- 2015: Assistant Professor of Medical Physics

1996- 2010: Lecturer of Medical Physics

Academic History

2010 - Ph.D. - Medical Physics

Mashhad University of Medical Sciences – Mashhad – Iran.

1995 - MSc. - Medical Physics

Tabriz University of Medical Sciences - Tabriz - Iran.

1992 - Bachelor of Science - Radiology Technology - Radiology Technology

Tabriz University of Medical Sciences - Tabriz - Iran.

1989 - Associate of science - Radiology Technology - Radiology Technology

Tabriz University of Medical Sciences - Tabriz - Iran.

1987- High School Diploma in Natural Sciences

29 Bahman high school - Tabriz - Iran.

Research Interests

Medical Physics, Radiobiology, Nuclear Medicine, SIMIND Monte Carlo simulation

Research projects

2022- Feasibility study of attenuation correction based on deep learning in 68Ga-Dotatate whole body PET imaging

Role: **Supervisor** Research type: Basic Date: 2022/June/12

Co-workers: Seyedi N, Sheikhzadeh P, Farzanehfar S, Sobhilord M.

2021- Evaluation of Polyethylene glycol coated iron oxide /gold conjugated Trastuzumab nanoparticle as contrast media in magnetic resonance imaging.

Role: **Supervisor** Research type: Basic Date: 2021/March/12

Co-workers: Mortezazadeh T, Ghorbani M, Malekzadeh R, Babayeh Abdollahi B.

2020- Evaluation on the effect of Wolfmet collimator on the detectability of SPECT imaging system.

Role: **Supervisor** Research type: Basic Date: 2020/March/12

Co-workers: Mahmoudian B, Darami M.

2019- Improvement of basal ganglia detectability in NCAT Phantom Brain SPECT by wavelet Transformation in Image Processing domain.

Role: **Supervisor** Research type: Basic Date: 2019/June/02

Co-workers: Seyyedarabi H, Mahmodian B, Saedikia M.

2018- Study on the effect of metal nanoparticles on radiosensitivity of gastric adenocarcinoma cell line with GEANT 4 Monte Carlo simulation.

Role: **Supervisor** Research type: Basic Date: 2018/March/11

Co-workers: Moslehi A, Batooei S.

2015- A study on evaluating of a suitable hole angle in slit—slant collimator to differentiate lower heart activity from subdiaphragmatic organs in single photon emission computed tomography.

Role: **Supervisor** Research type: Basic Date: 2016/Jan/11

Co-workers: Mahmoudian B, Garepapagh E, Darkhor P.

2015- Evaluation the sensitivity and spatial resolution of image using semiconductor CdTe detector in single photon emission computed tomography imaging.

Role: **Supervisor** Research type: Basic Date: 2015/Dec/31

Co-workers: Mahmoudian B, Asgharijafarabadi M, Abbaspour S.

2015- A study on accurate measurement of vascular emboli in CT images by Imaging Toolbox software MITK for providing a method for a suitable management in diagnosis and treatment of vascular emboli.

Role: **Supervisor** Research type: Basic Date: 2015/Mar/01

Co-workers: Pezeshkirad M, Eshraghi A, Ayatifard SF.

2014- Investigation of the radioprotectory effect of IMOD on human Peripheral blood lymphocytes in vitro.

Role: 1st Supervisor Research type: Basic Date: 2014/Dec/31

Co-workers: Baradaran B, Farajollahi AR, Asgharijafarabadi M, Sattarpour Z.

2014- Evaluation of the Combined Effects of hyperthermia and ploymeric coated magnetic nanoparticles as 5_Iodo_2_Deoxyuridine carrier on radiosensitivity of U87-MG human glioblastoma cancer cell lines.

Role: 2nd Supervisor Research type: Basic Date: 2014/Jul/05

Co-workers: Khoee Sa, Khoee Se, Hosseini SV.

2014- An investigation on radiation exposure to staff performing coronary angiography.

Role: 1st **Supervisor** Research type: Basic Date: 2014/Nov/25

Co-workers: Asadinezhad M, Sadremomtaz AR, Asgharijafarabadi M, Shoshtary A.

2014- Optimising of computed tomography imaging system for bone densitometery.

Role: **Supervisor** Research type: Basic Date: 2014/Aug/26

Co-workers: Abdollahifard K. Abdollahi MR. Garrosi I.

2014- A study on the targeted uptaking of 99mTc radiolabeled 2DG/DOX conjugated nanoparticles in breast tumor cells for SPECT imaging.

Role: 1st Supervisor Research type: Basic Date: 2014/Aug/26

Co-workers: Madjidi J, Mahmoudian B, Asgharijafarabadi M, Shamsi M.

2014- A study for optimized detection and differentiation of Parotid Tumors by Multiparametric Analysis of Perfusion and Diffusion MR Images.

Role: **Supervisor** Research type: Basic Date: 2014/Feb/17 Co-workers: Saligherad HR, Aghafathi L, Fathikazeroni A, Assili S.

2014- A study on determination of an optimized detector for single photon emission computed tomography.

Role: **Supervisor** Research type: Basic Date: 2014/Feb/10 Co-workers: Mahmoudian B, Abedi SM, Khoshakhlagh M.

2014- A study on optimizing of the medium energy collimator for quantitative imaging with 90-Y in SPECT imaging.

Role: 1st Supervisor Research type: Basic Date: 2014/Feb/23

Co-workers: Mahmoudian B, Garepapagh E, Rezaee H.

2013 - Application of chemodrugs (2DG/DOX) loaded on Zeolite nano composite for enhancing the efficiency of radiotherapy for breast cancer cells (SKBR3 & T47D) by a combined therapy method

Role: **Scientific cooperation** Research type: Basic Date: 2013/09/02

Co-workers: Khanmohammadi A, Divband B, Rashidi MR, Pirayesh Islamian J, Hatamian M.

2013 - Enhancing the Efficiency of Radiotherapy for Esophagus Squamous Carcinoma by a Combined Therapy Method with Chemotherapy (2DG/Metformin)

Role: **Scientific cooperation** Research type: Basic Date: 2013/03/08

Co-workers: Shafaee A, Pirayesh Islamian J, Farajollahi AR, Asghari Jafarabadi M, Rahmati Yamchi M, Nejati K, Zaree D.

2013 - Enhancing the efficiency of radiotherapy for breast cancer cells (SKBr3 & T47D) by a combined therapy method with nanoparticle coated chemodrugs (2DG/DOX)

Role: **Supervisor** Research type: Basic Date: 2013/06/04

Co-workers: Rashidi MR, Mesbahi A, Mohammadzadeh M, Asghari Jafarabadi M, Abbasi N, Hatamian M.

2013 - Enhancing the Efficiency of Radiotherapy for Breast Cancer Cells (SKBr3 & MCF7) by a Combined Therapy Method with Chemotherapy (2DG/MLN4924)

Role: **Supervisor** Research type: Basic Date: 2013/03/02

Co-workers: Baradaran B, Farajollahi AR, Mohammadzadeh M, Asghari Jafarabadi M, Shabestani Monfared A, OlaadGaffari M.

2013 - A study on optimizing the collimator of single photon emission computed tomographyRole: **Supervisor** Research type: Basic Date: 2013/03/11

Co-workers: Mahmodian B, Garepapagh E, Azarm AR.

2012 - Enhancing the radiosensitivity of Esophagus Squamos Cell Carcinoma by Hdm2 suppresion with siRNA

Role: **Supervisor** Research type: Basic Date: 2012/08/18

Co-workers: Baradaran B, Farajollahi AR, Mohammadzadeh M, Asghari Jafarabadi M, Karami H. Mohammadi M.

2012 - Comparing of the protective effect of Amifostin in precense of Lycopene on human blood lymphocyts In Vitro

Role: **Supervisor** Research type: Basic Date: 2012/08/18

Co-workers: Farajollahi AR, Asghari Jafarabadi M, Mehrali H.

2011 - Enhancing the efficiency of radiotherapy for breast cancer cells(SKBr3 & T47D) by a combined therapy method with chemotherapy(2DG/DOX)

Role: **Supervisor** Research type: Basic Date: 2011/08/18

Co-workers: Baradaran B, Mehnati P, Mohammadzadeh M, Asghari Jafarabadi M, Aghaee F.

2011 - Study the effect of radiotherapy in apoptosis induction on breast cancer cells (MCF7)

Role: **Scientific cooperation** Research type: Basic Date: 2012/06/18

Co-workers: Mehnati P, Baradaran B, Fazel M.

2010 - Monte carlo simulation of single photon emission tomography imaging system and assessment of parameters affecting image quality

Role: **Scientific Cooperation** Research type: Basic Date: 2008/09/18

Co-workers: Bahreyni Toossi MT, Pirayesh Islamian J, Momennezhad M, Zakavi SR, Naseri SH.

2004 - Study of the effects of 2 and 6 Gy gamma rays on cell cycle of CHO

Role: Scientific Cooperation Research type: Basic Date: 2004

Co-workers: Mehnati P, Pirayesh Islamian J, Farajollahi AR, Saedipour H.

2001 - Evaluation of the mitogenic effect of regional variety of red kidney beans on human peripheral blood lymphocytes in vitro

Role: **Scientific Cooperation** Research type: Basic Date: 2001/03/21 Co-workers: Hossainpourfaizi MA, Pirayesh Islamian J, Madinehzad SD.

2001 - Effects of 35 Hz, 2 mT magnetic field on peripheral blood lymphocytes of human in vitro and rat in vivo.

Role: **Scientific Cooperation** Research type: Basic-Applied Date: 2001/03/21

Co-workers: Hossainpour Faizi MA, Pirayesh Islamian J, Akbary Kameranvar S, Ahrabian GH, Estekhdami Mahinmorady S.

1995 - Study of the effects of radiotherapy on karyotype of cancer patients

Role: **Scientific Cooperation** Research type: Basic Date: 1995/01/31

Co-workers: Hossainpourfaizi MA, Pirayesh Islamian J.

Presentations

2018- Optimization of a SPECT system for imaging of 90-Y in Liver using monte carlo method.

Congress Title: The 12st Iranian Congress of Medical Physics.

Date: 19-20 July 2018. Congress Place: Tehran-Iran.

Authors: Sedigheh Jafari, Asghar Hadadi, Jalil Pirayesh Islamian, Mohammad Khoshakhlagh,

Mohammad Hosntalab, Farshid babapoor Mofrad.

2018- Optimization of an ultra-high-resolution rectangular pixelated parallel-hole collimator with a CZT pixelated semiconductor detector for HiRe-SPECT system.

Congress Title: The 12st Iranian Congress of Medical Physics.

Date: 19-20 July 2018. Congress Place: Tehran-Iran.

Authors: Abbaspour S, Tanha K, Mahmoudian B, Asadi M, Pirayesh Islamian J.

2018- The evaluation of slant hole collimator in myocardial perfusion SPECT: a simulation study.

Congress Title: The 12st Iranian Congress of Medical Physics.

Date: 19-20 July 2018. Congress Place: Tehran-Iran.

Authors: Darkhor P, Islamian JP, Mahmoudian B, Gharepapagh E.

2018- Feasibility of using Medical Imaging Interaction Toolkit in volumetric studies to accurate diagnosing of vascular emboli by Extended NURBS-based Cardiac-Torso phantom.

Congress Title: The 12st Iranian congress of Medical Physics.

Date: 19-20 July 2018. Congress Place: Tehran-Iran.

Authors: Seiedeh Fatemeh Ayatifard, Mahnaz Amini, Masoud Pezeshkirad, Negar Morovatdar,

Jalil Pirayesh Islamian.

2017- A Monte Carlo Study to Evaluation of the Effect of Collimator Hole Size and Material on ^{99m}Tc Source Response in the HiRe-SPECT.

Congress Title: The 21st Annual and 6th international congress of Nuclear Medicine and Molecular Imaging.

Date: 22-24 Nov 2017. Congress Place: Mashhad-Iran.

Authors: Abbaspour S, Islamian JP, Mahmoudian B.

2017- Evaluation the Sensitivity and Spatial Resolution of Image Using Semiconductor CdTe Detector in Single Photon Emission Computed Tomography Imaging.

Congress Title: The 21st Annual and 6th international congress of Nuclear Medicine and

Molecular Imaging.
Date: 22-24 Nov 2017.
Congress Place: Mashhad-Iran.

Authors: Abbaspour S, Islamian JP, Mahmoudian B.

2017- Evaluation of Different Slit Angles on Differentiating Extra Cardiac Activities from Cardiac by Utilizing Slit Slat Collimation in Myocardial Perfusion SPECT: A Simulation Study.

Congress Title: The 21st Annual and 6th international congress of Nuclear Medicine and

Molecular Imaging.
Date: 22-24 Nov 2017.
Congress Place: Mashhad-Iran.

Authors: Darkhor P, Islamian JP, Mahmoudian B, Gharepapagh E.

2017- Monte Carlo Simulation of Slit Slat Collimator in Single Photon Emission Computed Tomography.

Congress Title: 3rd Annual Student congress on Application of Optimized Medical Imaging Techniques & Procedures in Effective Diagnosis & Treatment of Disease.

Date: 22-23 Feb 2017. Congress Place: Tehran-Iran.

Authors: Darkhor P, Islamian JP, Mahmoudian B, Gharepapagh E.

2017- CdTe and CZT semiconductor Detectors for Improved Sensitivity and Resolution Radioisotopic Imaging.

Congress Title: 3rd Annual Student congress on Application of Optimized Medical Imaging Techniques & Procedures in Effective Diagnosis & Treatment of Disease.

Date: 22-23 Feb 2017. Congress Place: Tehran-Iran.

Authors: Abbaspour S, Islamian JP, Mahmoudian B.

2016- Development of Scintillators in Nuclear Medicine.

Congress Title: 20th annual meeting of Iranian society of nuclear medicine.

Date: 26-28 Oct 2016. Congress Place: Tehran-Iran.

Authors: Mohammad Khoshakhlagh, Jalil Pirayesh Islamian, Seyyed Mohammad Abedi, Babak

Mahmoudian, Alireza Mardanshahi.

2016- Evaluation of the effect of CdTe semiconductor detector thickness on ^{99m}Tc source response in small animal SPECT system: A SIMIND Monte Carlo study.

Congress Title: 20th annual meeting of Iranian society of nuclear medicine.

Date: 26-28 Oct 2016. Congress Place: Tehran-Iran.

Authors: Samira Abbaspour, Jalil Pirayesh Islamian, Babak Mahmoudian, Mohammad Asghari

Jafar Abadi.

2016- An overview on the slit slant Collimator in Single Photon Emission Computed Tomography.

Congress Title: 20th annual meeting of Iranian society of nuclear medicine.

Date: 26-28 Oct 2016. Congress Place: Tehran-Iran.

Authors: Parvaneh Darkhor, Jalil Pirayesh Islamian, Babak Mahmoudian, Esmael Garehpapagh.

2016- A Monte Carlo study for optimizing the detector of SPECT imaging using a XCAT Human Phantom.

Congress Title: 20th annual meeting of Iranian society of nuclear medicine.

Date: 26-28 Oct 2016. Congress Place: Tehran-Iran.

Authors: Mohammad Khoshakhlagh, Jalil Pirayesh Islamian, Seyed Mohammad Abedi, Babak

Mahmoudian.

2016- A Study on Determination of an Optimized Detector for Single Photon Emission Computed Tomography.

Congress Title: 20th annual meeting of Iranian society of nuclear medicine.

Date: 26-28 Oct 2016. Congress Place: Tehran-Iran.

Authors: Mohammad Khoshakhlagh, Jalil Pirayesh Islamian, Seyed Mohammad Abedi, Babak

Mahmoudian, Alireza Mardanshahi.

2014- A Monte Carlo Simulation study on Gallium SPECT imaging.

Congress Title: 18th Iranian congress of Nuclear Medicine.

Date: 12-14 Nov 2014. Congress Place: Tehran-Iran.

Authors: Jalil Pirayesh Islamian, Hoda rezaee Roshan, Babak Mahmoudian, Esmael

Garehpapagh.

2014- A study on determination of an optimized detector for single photon emission computed tomography.

Congress Title: 18th Iranian congress of Nuclear Medicine.

Date: 12-14 Nov 2014. Congress Place: Tehran-Iran.

Authors: Jalil Pirayesh Islamian, Mohammad khoshakhlagh, Seyed Mohammad Abedi, Babak

Mahmoudian.

2014- 99m-Tc radiotracing of Doxorubicin and 2-Doexy-D-Glocuse loaded nanoparticles in tumors.

Congress Title: 18th Iranian congress of Nuclear Medicine.

Date: 12-14 Nov 2014. Congress Place: Tehran-Iran.

Authors: Mahdiyeh Shamsi, Jalil Pirayesh Islamian, Jafar Majidi Zolbanin, Babak Mahmoudian,

Mohammad Asghari, Negar Abbasi, Naeimah Majidi, Leili Aghebati.

2014 - Studying of the effect of combine radiotherapy and gene therapy by siRNA technology on the frequency of apoptosis induction in SCC of esophagus

Congress Title: The 12th scientific Congress of radiographic sciences of Iran.

Date: 2014/05/13-16

Congress Place: Tehran-Iran.

Authors: Mohsen Mohammadi, Jalil Pirayesh Islamian, Mahmod Reza Aghamiri, Alireza

Farajollahi, Behzad Baradaran.

2014 - Effect of silencing hdm2 expression by small interfering RNA on radiosensitivity of esophageal squamous cell carcinoma

Congress Title: The 12th International Congress of Immunology and Allergy of Iran.

Date: 2014/04-05/29-02 Congress Place: Tehran-Iran.

Authors: Jalil Pirayesh Islamian, Behzad Baradaran, Mohsen Mohammadi.

2014 - Combination treatment with radiotherapy and chemotherapy drugs (MLN4924 and 2DG) on MCF-7 breast cancer cell line

Congress Title: The 12th International Congress of Immunology and Allergy of Iran.

Date: 2014/04-05/29-02 Congress Place: Tehran-Iran.

Authors: Maryam Olade Ghaffari, Jalil Pirayesh Islamian, Behzad Baradaran, Ali

Shabestanimonfared.

2014 - A Novel therapeutic approach for breast cancer: Nanoparticle coated with 2-Deoxy-D-Glucose and Doxorubicin

Congress Title: The 12th International Congress of Immunology and Allergy of Iran.

Date: 2014/04-05/29-02 Congress Place: Tehran-Iran.

Authors: Milad Hatamian, Jalil Pirayesh Islamian, Mohammad Reza Rashidi.

2013 - Studying the effect of combined nanoparticle, chemodrug and radiation therapy in targeted treatment of breast cancer

Congress Title: The 10th Iranian Congress of on Obstetrics and Gynecology.

Date: 2014/05/04-07

Congress Place: Tehran-Iran.

Authors: Jalil Pirayesh Islamian, Milad Hatamian, Mohammad Reza Rashidi.

2013 - Combination of Metformin with 2-deoxy D-glucose adjuvant with chemo/radiotherapy as an advanced approach in cancer treatment.

Congress Title: The 12th Iranian Congress of Medical Hematology and Oncology.

Date: 2013/05/23-25

Congress Place: Tehran-Iran.

Authors: Davood Zareie, Jalil Pirayesh Islamian, Abbas Shafaee.

2013 - Breast cancer Cells Combination treatment with radiotherapy and chemotherapy drugs (MLN4924 and 2DG).

Congress Title: The 12th Iranian Congress of Medical Hematology and Oncology.

Date: 2013/05/23-25

Congress Place: Tehran-Iran.

Authors: Olad ghaffari M,Pirayesh slamian J,Baradaran B,Shabestani monfared A.

2013 - Enhancing the efficiency of radiotherapy for breast cancer cells by a combined therapy method with nanoparticle coated chemodrugs.

Congress Title: The 12th Iranian Congress of Medical Hematology and Oncology.

Date: 2013/05/23-25

Congress Place: Tehran-Iran.

Authors: Hatamian M, Pirayesh Islamian J, Rashidi MR.

2013 - Enhancing the radiosensitivity of Esophagus Squamos Cell Carcinoma by Hdm2 suppression with siRNA.

Congress Title: The 29th Iranian Congress of Radiology.

Date: 2013/05/14-17

Congress Place: Tehran-Iran.

Authors: Pirayesh Islamian J, Mohammadi M.

2013 - Enhancing the efficiency of radiotherapy for breast cancer cells (SKBr3 & T47D) by a combined therapy method with chemotherapy (2DG/DOX)

Congress Title: The 8th International congress on Breast Cancer

Date: 2013/02/21-23

Congress Place: Tehran-Iran.

Authors: Aghaee F, Pirayesh Islamian J, Baradaran B, Mohammadzadeh M, Asghari Jafarabadi

M, Mesbahi A, Farajollahi AR

2013 - THz Imaging in Medical Diagnosis

Congress Title: The 28th Iranian congress of Radiology

Date: 2012/05/15-18 Congress Place: Tehran-Iran.

Authors: Asili S, Pirayesh Islamian J

2012 - Effective factors in the breast cancer cell radiotherapy

Congress Title: The 8th International congress on Breast Cancer

Date: 2013/02/21-23

Congress Place: Tehran-Iran.

Authors: Mehnati P, Fazel M, Baradaran B, Pirayesh Islamian J.

2012 - Study of apoptotic death in breast cancer cells after radiotherapy

Congress Title: The 4th annual congress of the Iranian society of Gynecological oncology

Date: 2012/06/19-21

Congress Place: Tehran-Iran.

Authors: Fazel M, Mehnati P, Baradaran B, Pirayesh Islamian J.

2011 - 2 - Deoxy - D - Glucose and Ionizing Radiation Responses of T47D and SKBR3 Breast Cancer Cells

Congress Title: The 1st MEFOMP International conference on Medical Physics

Date: 2011/11/2-4

Congress Place: Shiraz-Iran

Authors: Aghaee F, Baradaran B, Pirayesh Islamian J, Mohammadzadeh M, Asghari Jafarabadi M,

Mehnati P

2011 - Doxorubicin and Ionizing Radiation Responses of T47D and SKBR3 Breast Cancer Cells

Congress Title: The 1st MEFOMP International conference on Medical Physics

Date: 2011/11/2-4

Congress Place: Shiraz-Iran

Authors: Aghaee F, Baradaran B, Pirayesh Islamian J, Mohammadzadeh M, Asghari Jafarabadi M,

Mehnati P

2011 - Proton in Diagnosis and Treatment; a review

Congress Title: The 1st MEFOMP International conference on Medical Physics

Date: 2011/11/2-4

Congress Place: Shiraz-Iran

Authors: Salman Zakariaev S, Pirayesh Islamian J

2011 - A comparison study of digital and film screen mammography imaging from the viewpoint of patient's rights

Congress Title: The 1st MEFOMP International conference on Medical Physics

Date: 2011/11/2-4

Congress Place: Shiraz-Iran

Authors: Mehnati P, Pirayesh Islamian J.

2010 - Evaluation of the effect of backscatter material thickness on ^{99m}Tc sources responses in SPECT with Monte Carlo simulation.

Congress Title: 14th Iranian Annual and International Congress of Nuclear Medicine,

Mashhad, Iran. Date: 2010/11/4-6

Congress Place: Mashad-Iran

Authors: Pirayesh Islamian J, Bahreyni Toosi MT, Momennezhad M, Zakavi SR, Sadeghi R,

Ljungberg M.

2010 - Monte Carlo study of the effect of collimator thickness on 99mTc sources responses in SPECT.

Congress Title: 14th Iranian Annual and International Congress of Nuclear Medicine.

Date: 2010/11/4-6

Congress Place: Mashad-Iran

Authors: Pirayesh Islamian J, Bahreyni Toosi MT, Momennezhad M, Zakavi SR, Ljungberg M.

2009 - SIMIND Monte Carlo simulation of a single photon emission CT.

Congress Title: International conference on Medical Physics, Radiation Protection and Radiobiology

Date: 2009/01/11-13

Congress Place: Delhi- India

Authors: Bahreyni Toossi MT, Pirayesh Islamian J, Momennezhad M, Ljungberg M, Naseri SH.

2007 – Study of the effects of gamma rays with 2 and 6 Gy doses on cell cycle of Chinese hamster ovary.

Congress Title: 7th congress of Medical physics

Date: 2007/02/13-15 Congress Place: Ahvaz - Iran

2003 - Effects of 35 Hz, 2 mT magnetic field on peripheral blood lymphocytes of human in vitro and rat in vivo.

Congress Title: First congress on molecular and cellular biology

Date: 2003/02/20

Congress Place: Ahvaz - Iran

Authors: Pirayesh Islamian J, Hossainpour Faizi MA, Akbary Kameranyar S, Ahrabian GH,

Estekhdami Mahinmorady S.

2001 - Protective management and radiation doses calculations in nuclear physics

Congress Title: First Iranian congress of nuclear physics

Date: 2001/10/15

Congress Place: Tabriz - Iran

Authors: Bayburdi A, Pirayesh Islamian J.

2001 - Application of Gel dosimetry in teletherapy

Congress Title: First International Iranian congress of cancer

Date: 2001/09/11

Congress Place: Mashhad - Iran

Authors: Farajollahi AR, Saedipoor H, Pirayesh Islamian J.

2001 - Environment condition effect in 40 mental retardant children carrying dominant chromosomal aberrations

Congress Title: The 1st International Congress on child& adolescent psychiatry

Date: 2001/05/15

Congress Place: Tehran - Iran

Authors: HossainpourFaizi MA, Akbari Kameranvar S, Pirayesh Islamian J.

1997 - Evaluation of chromosome aberrations on peripheral blood lymphocytes of 43 radiology technologists

Congress Title: 3th Iranian congress of medical physics

Date: 1997/11/11

Congress Place: Tehran - Iran

Authors: Hossainpour Faizi MA, Pirayesh Islamian J.

1997 - Evaluation of the mitogenic effect of regional variety of red kidney beans on human peripheral blood lymphocytes in vitro

Congress Title: 6th Iranian congress of biology

Date: 1997/11/02

Congress Place: Isfahan - Iran

Authors: Hossainpour Faizi MA, Pirayesh Islamian J, Madinehzad D, Akbari Kameranvar S.

1995 - Effects of radiotherapy on the karyotype of cancer patients

Congress Title: 12th Iranian congress of physiology and pharmacology

Date: 1995/11/06

Congress Place: Tehran - Iran

Authors: Hossainpour Faizi MA, Pirayesh Islamian J.

Journal Articles

- 1. Hossainpour Faizi MA, **Pirayesh Islamian J. Evaluation of chromosome aberrations on peripheral blood lymphocytes of 43 radiology technologists.** Basic medical sciences Journal of Tabriz medical sciences university. Spring & Summer 1998;1(1):29-34.
- 2. Hossainpour Faizi MA, Pirayesh Islamian J. Evaluation of the effects of radiotherapy on karyotype of cancer patients. Iranian Journal of Basic Medical Sciences.1999;2(2):64-74.
- 3. Hossainpour Faizi MA, **Pirayesh Islamian J**, Madinezad D. **Evaluation of the mitogenic effects of different samples of red kidney beans from north west of Iran on human peripheral blood lymphocytes in vitro.** Journal of Agriculture Science (University of Tabriz).2000;9(4):1-16.
- **4. Pirayesh Islamian J**, Hossainpour Faizi MA, Akbary Kameranwar S, Ahrabian GH, Estekhdami Mahinmorady S. **Effects of 35 Hz, 2 mT Magnetic Field on Peripheral Blood Lymphocytes of Human In Vitro and Rat In Vivo.** Journal of Kerman University of Medical Sciences. Autumn 2003;10(4):211-18.
- 5. Farajollahi AR, Pirayesh Islamian J, Saedipour H. Measurement of dose distribution using polymer gel for potential verification of a treatment planning system. Pharmaceutical Sciences, Autumn & Winter 2004;2:31-40.

- **6. Pirayesh Islamian J. The Biological Effects of Cellular Phones.** Iranian Journal of Medical Physics, 2009; 2(7): 85-91.
- 7. Bahreyni Toossi MT, **Pirayesh Islamian J**, Momennezhad M, Ljungberg M, Naseri SH. **SIMIND Monte Carlo simulation of a single photon emission CT.** *J Med Phys* 2010;35(1):42-7.
- 8. Bahreyni Toosi MT, **Pirayesh Islamian J**, Momennezhad M, Zakavi SR, Sadeghi R, , Ljungberg M. **Image Optimization in Single Photon Emission Computed Tomography by Hardware Modifications with Monte Carlo Simulation**. Iran J Med Phys 2010;7(2):09-20.
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Extended Abstracts:

- 1. Pirayesh Islamian J, Bahreyni Toosi MT, Momennezhad M, Zakavi SR, Sadeghi R, Ljungberg M. **Monte Carlo study of the effect of collimator thickness on** ^{99m}**Tc sources responses in SPECT.** *Iran J Nucl Med* 2010;18(suppl 1):129.
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- 9. Samira Abbaspour, Parvaneh Darkhor, Jalil Pirayesh Islamian. **Optimization of an ultra-high-resolution rectangular pixelated parallel-hole collimator with a CZT pixelated semiconductor detector for HiReSPECT system**. *Iran J Med Phys.* 2018;15(Special Issue-12th. Iranian Congress of Medical Physics): 156-156, DOI: 10.22038/ijmp.2018.12658
- 10. Parvaneh Darkhor, Samira Abbaspour, Jalil Pirayesh Islamian. **The evaluation of slant hole collimator in myocardial perfusion SPECT: a simulation study**. *Iran J Med Phys.* 2018;15 (Special Issue-12th. Iranian Congress of Medical Physics): 161-161, DOI: 10.22038/ijmp.2018.12666
- 11. SeiedehFatemeh Ayatifard, Mahnaz Amini, Masoud Pezeshkirad, Negar Moro vatdar, Jalil Pirayesh Islamian. **Feasibility of using Medical Imaging Interaction Toolkit in volumetric studies to accurate diagnosing of vascular emboli by Extended NURBSbased Cardiac-Torso phantom**. *Iran J Med Phys*. 2018;15(Special Issue-12th. Iranian Congress of Medical Physics): 438-438, DOI: 10.22038/ijmp.2018.13127

Books (Translated to Farsi language)

2017 - Introduction to Radiation Protection

Publisher: Pezhvake Alborz, Tabriz, Iran.

Publication Place: Tabriz

Authors: S. Ahmadi- F. Yazadansetad- J. Pirayesh Islamian – P. Mehnati

2004 - Diagnostic Ultrasound

Publisher: Tabriz University of Medical Sciences, Tabriz, Iran.

Publication Place: Tabriz

Authors: J. Pirayesh Islamian - H. Tizfahm

2002 - Radiation Therapy Physics

Publisher: Tabriz University

Publication Place: Tabriz

Authors: M.A.Hossainpourfaizi - J. Pirayesh Islamian - R.Sedigi

2001 - Ultraviolet Radiation

Publisher: Tabriz University
Publication Place: Tabriz

Authors: M.A.Hossainpourfaizi - J. Pirayesh Islamian

2000 - An Introduction to Computed Tomography

Publisher: Tabriz University of Medical Sciences, Tabriz, Iran.

Publication Place: Tabriz

Authors: J. Pirayesh Islamian - A.Kianynazarloo

1998 - Radiation Oncology

Publisher: Tabriz University
Publication Place: Tabriz

Authors: M.A.Hossainpourfaizi - J. Pirayesh Islamian

1997 - Human Cytogenetics, Practical approach

Publisher: Amidi Pub., Tabriz, Iran.
Publication Place: Tabriz

Authors: M.A. Hossainpourfaizi - J. Pirayesh Islamian

Supervision of Thesis

2022 – Feasibility study of attenuation correction based on deep learning in 68Ga-Dotatate whole body PET imaging

Role: 1st Supervisor

Co-workers: Sobhilord M, Seyedi N, Sheikhzadeh P, Farzanehfar S.

2020- Evaluation on the effect of Wolfmet collimator on the detectability of SPECT imaging system.

Role: Supervisor

Co-workers: Darami M, Mahmoudian B.

2019 - Improvement of basal ganglia detectability in NCAT Phantom Brain SPECT by wavelet Transformation in Image Processing domain

Role: 1st Supervisor

Co-workers: Saedikia M, Seyyedarabi MH, Mahmoudian B.

2018 - Study on the effect of metal nanoparticles on radiosensitivity of gastric adenocarcinoma cell line with GEANT 4 Monte Carlo simulation

Role: 1st Supervisor

Co-workers: Batooee S, Moslehi A.

2014 - A study on evaluating of a suitable hole angle in slit—slant collimator to differentiate lower heart activity from subdiaphragmatic organs in single photon emission computed tomography

Role: 1st Supervisor

Co-workers: Darkhor P, Mahmoudian B, Garepapagh E.

2014 - Evaluation the sensitivity and spatial resolution of image using semiconductor CdTe detector in single photon emission computed tomography imaging

Role: 1st Supervisor

Co-workers: Abbaspour S, Mahmodian B, Asghari Jafarabadi M.

2014 - A study on the targeted uptaking of 99m Tc radiolabeled 2DG/DOX conjugated nanoparticles in breast tumor cells for SPECT imaging

Role: 1st Supervisor

Co-workers: Shamsi M, Majidizolbanin J, Mahmodian B, Asghari Jafarabadi M.

2014 - Evaluation of the Combined Effects of hyperthermia and ploymeric coated magnetic nanoparticles as 5_IUDR carrier on radiosensitivity of U87-MG human glioblastoma cancer cell lines

Role: 2nd Supervisor

Co-workers: Hossaini SV, Khoee Sa, Khoee Se, Mahdavi SR.

2014 - A study on accurate measurement of vascular emboli in CT images by Imaging Toolbox software MITK for providing a method for a suitable management in diagnosis and treatment of vascular emboli

Role: Supervisor

Place: Tabriz University of Medical Sciences

Co-workers: Ayatifard SF, Pezashkirad M, Amini E, Asghari Jafarabadi M.

2014 - Investigation of the radioprotectory effect of IMOD on human Peripheral blood lymphocytes in vitro

Role: **Supervisor**

Place: Tabriz University of Medical Sciences

Co-workers: Sattarpour Z, Baradaran B, Farajollahi AR, Asghari Jafarabadi M.

2014 - Determination of absorbed dose in the three organs of cardiologist and technologist from coronary angiography examinations in the field of irradiation

Role: 1st Supervisor

Place: Tabriz University of Medical Sciences

Co-workers: Shoshtari A, Asadinezhad M, Sadremomtaz A, Asghari Jafarabadi M.

2014 - A study on optimizing the detector of single photon emission computed tomography

Role: **Supervisor** Research type: Basic Date: 2014/11/30

Co-workers: Khoshakhlagh M, Abedi SM, Mahmodian B, Asghari Jafarabadi M.

2014 - A study on optimizing of density determination in the computed tomography for bone densitometry

Role: **Supervisor** Research type: Basic Date: 2014/01/26

Co-workers: Garrosi I, Abdollahifard K, Abdollahi MR.

2014 - A study on optimizing of the collimator for quantitative imaging with Y-90 in SPECT imaging method.

Role: **1st Supervisor** Research type: Basic Date: In officials

Place: Tabriz University of Medical Sciences

2013 - A study for the improvement of ability on detection and differentiation of Parotid Tumors by Multiparametric Analysis of Perfusion and Diffusion MR Images

Role: 1st Supervisor

Place: Tabriz University of Medical Sciences

2013 - A study on optimizing the collimator of single photon emission computed tomography

Role: 1st Supervisor

Place: Tabriz University of Medical Sciences

2013 - Enhancing the efficiency of radiotherapy for breast cancer cells(SKBr3 & T47D) by a combined therapy method with nanoparticle coated chemodrugs(2DG/DOX)

Role: 1st Supervisor

Place: Tabriz University of Medical Sciences

2013 - Enhancing the efficiency of radiotherapy for esophagus SCC by adjuvant therapy with Metformin and 2-deoxy-D- Glucose

Role: 1st Supervisor

Place: Shahid Beheshti University of Medical Sciences

2012 - Enhancing the Efficiency of Radiotherapy for Breast Cancer Cells (SKBr3 & MCF7) by a Combined Therapy Method with Chemotherapy (2DG/MLN4924)

Role: 1st Supervisor

Place: Babol University of Medical Sciences

2012 - Enhancing the radiosensitivity of Esophagus Squamos Cell Carcinoma by Hdm2 suppression with siRNA

Role: 1st Supervisor

Place: Shahid Beheshti University of Medical Sciences

2012 - Comparing of the protective effect of Amifostine in presence of Lycopene on human blood lymphocytes In Vitro

Role: Supervisor

Place: Tabriz University of Medical Sciences

2011 - Enhancing the efficiency of radiotherapy for breast cancer cells (SKBr3 & T47D) by a combined therapy method with chemotherapy (2DG/DOX)

Role: 1st Supervisor

Place: Tabriz University of Medical Sciences

2011 - Study the effect of radiotherapy in apoptosis induction on breast cancer cells (MCF7)

Role: Consulter

Place: Tabriz University of Medical Sciences

Scientific association membership

Member of research projects evaluation committee in Deputy of research of faculty of Medicine, Tabriz University of Medical Sciences, Tabriz, Iran.

Start Date: 2003/04/21 Finish Date: 2005/02/15

Member of Immunology Research Center, Tabriz University of Medical Sciences, Tabriz, Iran.

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Member of Medical Radiation Sciences Research Team, Tabriz University of Medical Sciences,

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Member of Medical Physics scientific board, Ministry of Health, Treatment and Education, Iran.

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Hobbies

Climbing, Biking, and Nature photography