# **CANCER RESEARCH SCIENTIST**

Exceptionally dedicated, solutions-focused professional with a history of researching and discovering innovative cancer prevention and treatment strategies. Extensive clinical experience in tumor treatment with radiotherapy, chemotherapy, chemo-radiation, immunotherapy, and hormone therapy. Additional background instructing university students in radiology and medicine programs. Proven expertise in writing grant proposals to secure research funding. Author of multiple articles in scholarly publications as well as rectal cancer book, educational CD on breast cancer, and benign and malignant breast diseases book.

AREAS OF EXPERTISE & RESEARCH INTERESTS:

- Radiobiology & Molecular Biology of Tumors
- Tumor Characteristics Determination
- Nanotechnology & Radiotherapy
- New Techniques of Radiotherapy
- Research Cancer Management
- Cancer Treatment & Prevention
- Tissue Isolation & Stabilization
- Data Analysis & Interpretation

## **EDUCATION & CREDENTIALS**

**Radiation-Oncology, Second Degree Acquisition in Board Examination**, 2003 – MEDICAL SCHOOL, ISFAHAN UNIVERSITY OF MEDICAL SCIENCES, Isfahan, Iran

Dissertation: "Pelvic Radiation Effects on the Complete Blood Count"

**General Physician Degree**, 1996 – MEDICAL SCHOOL, TABRIZ ISLAMIC AZAD UNIVERSITY, Tabriz, Iran <u>Dissertation</u>: "Assay of 10 Years Peptic Ulcer Complications"

#### **Professional Associations**

Radiation-Oncology Society of Iran ~ Iranian Cancer Society Policy Making Committee of Stem Cell Research Center of Tabriz University of Medical Sciences

### **PROFESSIONAL EXPERIENCE**

#### TABRIZ UNIVERSITY OF MEDICAL SCIENCES, Tabriz, Iran

#### Professor, 3/2022 - Present

Leverage 15+ year total tenure with university to serve in current role delivering effective lectures to residents and students in radiology, medicine, and midwife programs. Develop instructional materials, create practice and examination questions, and facilitate medical simulation and small group learning activities. Administer exams to assess student clinical skills and competencies. Lead physical examination and medical interview training. Serve on faculty committees and advise on course content design and modification.

#### **Key Achievement:**

 Successfully completed training fellowships in Palliative Care, Hematology-Oncology, and Gynecology-Oncology.

#### TABRIZ UNIVERSITY OF MEDICAL SCIENCES, Tabriz, Iran

#### Associate Professor, 4/2010 – 3/2022

Leverage 15+ year total tenure with university to serve in current role delivering effective lectures to residents and students in radiology, medicine, and midwife programs. Develop instructional materials, create practice and examination questions, and facilitate medical simulation and small group learning activities. Administer exams to assess student clinical skills and competencies. Lead

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physical examination and medical interview training. Serve on faculty committees and advise on course content design and modification.

#### **Key Achievement:**

 Successfully completed training fellowships in Palliative Care, Hematology-Oncology, and Gynecology-Oncology.

#### IMAM REZA HOSPITAL, Tabriz, Iran

#### Head of Education, Treatment, and Research Center, 9/2007 – 10/2012

Developed, implemented, and evaluated comprehensive plan for meeting educational needs of hospital facility. Acted as educational resource at the hospital level and for core system activities. Promoted team approach to health care delivery. Provided staff development expertise as educator, consultant, leader and researcher. Directed research center operations, managed budget, and enhanced cancer research with facility-wide programs and initiatives.

#### **Key Achievement:**

• Created atmosphere and standards for cutting-edge, world class research at hospital.

#### TABRIZ UNIVERSITY OF MEDICAL SCIENCES, Tabriz, Iran

#### **Assistant Professor,** 10/2003 – 4/2010

Created and presented lectures to residents and students in radiology, medicine, and midwife programs. Designed course materials, developed practice and examination questions, and led medical simulation and small group learning activities. Wrote and administered exams to assess student clinical skills and competencies.

#### EAST AZARBAYJAN PROVINCE CONTINUING MEDICAL EDUCATION, East Azarbayjan Province, Iran

#### Director, 6/2007 - 9/2009

Oversaw development, direction, and coordination of all continuing medical education activities. Served on committees to achieve integrated education program for physician needs. Acted as liaison to healthcare educators on design of continuing professional development programs.

#### WORKSHOPS

- 1. ICDL (International Computer Driving License) for Academic staff workshop , EDC & NPMC , Tabriz University of Medical Sciences , (2006).
- 2. Proposal Writing and Final Report workshop , Tabriz University of Medical Sciences (2007).
- 3. Sampling and sample size estimation workshop , Tabriz University of Medical Sciences (2007).
- 4. Primary Statistical Methods in Medical Research , Tabriz University of Medical Sciences (2008).
- 5. Advanced Statistical Methods in Medical Research , Tabriz University of Medical Sciences (2008).
- 6. Using SPSS for data analyzing in Medical Research , Tabriz University of Medical Sciences (2009).
- 7. Principles of Presenting in English Seminars , Tabriz University of Medical Sciences (2010).
- 8. Academic writing workshop, Tabriz University of Medical Sciences(2010).
- 9. Epidemiological Studies workshop, Tabriz University of Medical Sciences (2011).

10. Guideline Writing workshop, Tabriz University of Medical Sciences (2013).

- 11. Clinical Trial; Design and Application, Tabriz University of Medical Sciences (2013).
- 12. Sample Size Estimation in RCTs , Tabriz University of Medical Sciences (2014).

13. Standards of Trial Reporting; CONSORT, Tabriz University of Medical Sciences (2014).

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14 years of additional clinical experience in treatment of various tumors with radiotherapy, chemotherapy, chemo-radiation, immunotherapy, and hormone therapy.

# MOHAMMAD MOHAMMADZADEH

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#### PUBLICATIONS

- 1. Reza Mahdavi. Elnaz Faramarzi. **Mohammad Mohammadzadeh,** Jamal Ghaeamaghami, Morteza V. Jabbari, "Consequences of Raiotherapy and Nutritional Status, Dietary Intakes, Serum Zinc and Copper Levels in Patients with Gastrointestinal Tract and Head and Neck Cancer," *Saudi Medical Journal.* 2007; Vol. 28 (3): 435-440.
- Reza Mahdavi, Elnaz Faramarzi, Mohammad Mohammadzadeh, Masoud Pourmoghaddam, "Evaluation of Oxidative Stress, Antioxidant Status And Serum Vitamin C Levels in Cancer Patients," *Biol Trace Elem Res.* DOI 10.1007/s12011-008-8309-2.
- 3. Elnaz Faramarzi, Reza Mahdavi, **Mohammad Mohammadzadeh**, Jamal Ghaeammaghami, "Incidence of Eating Problem, Taste Changes and Food Preference of Cancer Patients During Radiotherapy," *Research Journal of Biological Sciences*. 551-556,207.C MED Well Journal 2007.
- 4. **Mohammadzadeh M.**, Mesbahi A., "MC Estimation of Out-Of-Field Organ Doses from Scattered Photons, Photoneutrons, and Capture Gamma Rays in Prostate Radiation Therapy," *Nuclear Technology and Radiation Protection*. 2010;25(2):78-84.
- 5. Mesbahi A, Keshtkar A, Mohammadi E, **Mohammadzadeh M.**, "Effect of Wedge Filter and Field Size on Photoneutron Dose Equivalent for an 18 MV Photon Beam of a Medical Linear Accelerator," *Applied Radiation and Isotopes*. 2010;68(1):84-9.
- 6. **Mohammadzadeh M**, Alikhah H, Zareh AGA, "Comparison of Bone Scan With Carbohydrate Antigen 15-3 for Evaluation of Bone Metastasis Of Breast Cancer," *Pakistan Journal of Biological Sciences*. 2010;13(4):175-9.
- Khoshbaten M, Zadimani A, Bonyadi MR, Mohammadzadeh M., Gachkar L, Pourhoseingholi MA, "Helicobacter Pylori Infection Reduces the Risk of Esophageal Squamous Cell Carcinoma: A Case-Control Study in Iran," *Asian Pacific Journal of Cancer Prevention*. 2011;12(1):149-5.
- 8. Seye Kazem Mirinezhad, Mohammad Hossein Somi, Amir Ghasemi Jangjoo, Farshad Seyednezhad, Saeed Dastgiri, **Mohammad Mohammadzadeh**, Ali Reza Naseri, Behnam Nasiri, "Survival Rate and Prognostic Factors of Esophageal Cancer in Eastern Azerbaijan Province, North-West of Iran," *Asian Pac J Cancer Prev.* 2012;13(7):3451-4.
- 9. Elnaz Faramarzi, Reza Mahdavi, **Mohamad Mohammadzadeh**, Behnam Nasiri Motlagh, "Validation of Nutritional Risk Index Method Against Patient–Generated Subjective Global Assessment in Screening Malnutrition in Colorectal Cancer Patients," *Chin J Cancer Res*. 2013 Oct;25(5):544-8. doi: 10.3978/j.issn.1000-9604.2013.10.04.

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- Mohammad Mohammadzadeh, Reza Mahdavi, Elnaz Faramarzi, Behnam Nasiri Motlagh, "Effects of conjugated linoleic acid supplementation on inflammatory factors and matrix metalloproteinase enzyme in colorectal cancer patients undergoing chemoradiotherapy," *Integr Cancer Ther.* 2013 Nov;12(6):496-502. doi: 10.1177/1534735413485417. Epub April 30, 2013.
- 11. Faramarzi, E., Mahdavi, R., **Mohammadzadeh, M.,** and Motlagh, B.N., "Effect of Conjugated Linoleic Acid Supplementation on Nutritional Status, Symptoms of Eating Problems and Dietary Intake in Rectal Cancer Patients Undergoing Chemoradiotherapy," *Current Topics in Nutraceutical Research,* (in press).
- Mirinezhad, S.K., Jangjoo, A.G., Seyednejad, F., Naseri, A.R., Mohammadzadeh, M., Nasiri, B., Eftekharsadat, A.T., Farhang, S., and Somi, M.H, "Impact of Tumor Length on Survival for Patients with Resected Esophageal Cancer," *Asian Pac J Cancer Prev.*, 15(2):691-4, 2014.
- 13. **Mohammadzadeh, M**., Pourzand, A., Eftekhar-Sadat, A.T., Alikhah, H., and Naghavi-Behzad, M., "A Case of Concurrent Several Forms of Thyroid Cancer," *Niger Med J.*, Sep. 54(5):351-3, DOI: 10.4103/0300-1652.122372, 2013.
- Mirinezhad, S.K., Somi, M.H., Shirmohamadi, M., Seyednejad, F., Jangjoo, A.G., Ghojazadeh, M., Mohammadzadeh, M., Naseri, A.R., and Nasiri, B., "Impact of Postoperative Chemoradiotherapy and Chemoradiotherapy Alone for Esophageal Cancer in North-West Iran," Asian Pac J Cancer Prev., 14(6):3921-4, 2013.
- Aghaee, F., Islamian, J.P., Baradaran, B., Mesbahi, A., Mohammadzadeh, M., and Jafarabadi, M.A., "Enhancing the Effects of Low Dose Doxorubicin Treatment by the Radiation in T47D and SKBR3 Breast Cancer Cells," *J Breast Cancer*, June 16(2):164-70. DOI: 10.4048/jbc.2013.16.2.164, 2013, E-pub June 28, 2013.
- 16. Mirinezhad, S.K., Somi, M.H., Seyednezhad, F., Jangjoo, A.G., Ghojazadeh, M., Mohammadzadeh, M., Naseri, A.R., and Nasiri, B., "Survival in Patients Treated with Definitive Chemo-Radiotherapy for Non-Metastatic Esophageal Cancer in North-West Iran," *Asian Pac J Cancer Prev.*, 14(3):1677-80, 2013.
- 17. Namdar AM, Sadeghi-Bazargani H, **Mohammadzadeh M**, Mesbahi A. Radiation-induced Hypothyroidism in Survivors of Head-and-Neck and Breast Cancers After 3-Dimensional Radiation Therapy: Dose-Response Models and Clinical-Dosimetric Predictors. *Rep Radiother Oncol*. 2020;7(1). doi:10.5812/rro.102343
- Faramarzi E, Mohammadzadeh M, Sanaie S, Andersen V, Mahdavi R. Effects of conjugated linoleic acid supplementation on serum leptin levels, oxidative stress factors and tumor marker in rectal cancer patients undergoing preopeatrive chemoradiotherapy. *MNM*. 2021;14(3):245-253. doi:10.3233/MNM-200507
- 19. Jouyban A, Djozan D, Mohammadandashti P, **et al**. Co-liquefaction with acetone and GC analysis of volatile compounds in exhaled breath as lung cancer biomarkers. *Bioimpacts*. 2017;7(2):99-108. doi:10.15171/bi.2017.13
- 20. Risk Factors of Colorectal Cancer in Northwest Iran. *j clin res gov*. Published online 2014. doi:10.13183/jcrg.v3i2.86
- 21. **Mohammadzadeh M,** Ghiasi H. Skyshine Dose Estimations for an 18 MeV Photon Beam Using MCNPX Code: A Comparison of Flattened and Flattening Filter-Free Beam. *fbt*. Published online September 7, 2021. doi:10.18502/fbt.v8i3.7117
- 22. Faramarzi E, **Mohammadzadeh M**, Sanaie S, Andersen V, Mahdavi R. Effects of conjugated linoleic acid supplementation on serum leptin levels, oxidative stress factors and tumor

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marker in rectal cancer patients undergoing preopeatrive chemoradiotherapy. *MNM*. 2021;14(3):245-253. doi:10.3233/MNM-200507

23. **Mohammadzadeh M**, Hatefi S, Reshadi N, Sanaat Z, Ghaffary S. Assessment of the Adherence Rate of Acute Chemotherapy Induced Nausea and Vomiting Prophylaxis Regimens by Medical Team to NCCN Clinical Recommendations: Cross-Section Observation. *jpc*. Published online April 19, 2021. doi:10.18502/jpc.v9i1.6033