

# Mehrdad Asghari Estiar (Estiar MA)

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## EDUCATION

2008-2012      **B.Sc.**, Medical Laboratory Sciences, Tabriz University of Medical Sciences, Tabriz, Iran.  
2012-2015      **M.Sc.**, Human Genetics, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.  
2018-Now      **PhD Candidate**, Department of Human Genetics, McGill University, Montreal, QC, Canada

## SCIENTIFIC WORK EXPERIENCE

Research Assistant, Tabriz Genetic Analysis Center (TGAC), Tabriz University of Medical Sciences, Tabriz, Iran

## HONORS & AWARDS

1. The Best Student of Iran award in 2011
2. The Best Student of Tehran University of Medical Sciences award in 2016
3. Tehran University of Medical Sciences (2<sup>nd</sup> Ibn-Sina Festival, 2015) – Best Student Researcher
4. The Third International Congress of Immunology, Asthma and Allergy, 2017, Tehran, Iran – Best Young Researcher Award
5. Elected Researcher in the Third Symposium of Medical Laboratory Technologies & Students 2016, Tehran, Iran
6. Elected Student in Student Festival of 5<sup>th</sup> International Congress of Laboratory & Clinic 2012, Tehran, Iran
7. 12<sup>th</sup> National Conference on Medical Education, Mashhad, Iran 2011 – Best Poster Presentation
8. Bronze Medal, 400m run races in the 9th Medical Sciences Students Olympiad, Kermanshah, Iran, 2010
9. Healthy Brains for Healthy Lives Doctoral Fellowship, 2019
10. Graduate Excellence Award, McGill University 2018
11. Graduate Travel Award, Department of Human Genetics, McGill University, Canada 2019
12. Graduate Travel Award, Department of Human Genetics, McGill University, Canada 2020
13. Graidia & Arthur Victor Movement Disorder Endowment Travel Award, Montreal Neurological Institute-Hospital, 2020
14. The Bursary to attend the Genomics of Rare Disease Conference 2020 at the Wellcome Genome Campus, Cambridge, UK.
15. Fonds de la recherche en santé du Québec (FRQS), Canada
16. Internal Studentship Faculty of Medicine, McGill University, 2020

## PAPER PUBLICATIONS (ENGLISH)

1. Kolahi S, Rashtchizadeh N, Mahdavi AM, Farhadi J, Khabbazi A, Sakhinia E, Bahavarnia N, Farajzadeh Polsangi MJ, Babaloo Z, **Estiar MA**. Evaluation of DNA methylation status of toll-like receptors 2 and 4 promoters in Behcet's disease. *J Gene Med* 2020 Oct;22(10):e3234.
2. Bis-Brewer DM, Gan-Or Z, Sleiman P; Inherited Neuropathy Consortium, Hakonarson H, Fazal S, Courel S, Cintra V, Tao F, **Estiar MA**, Tarnopolsky M, Boycott KM, Yoon G, Suchowersky O, Dupré N, Cheng A, Lloyd TE, Rouleau G, Schüle R, Züchner S. Assessing non-Mendelian inheritance in inherited axonopathies. *Genet Med*. 2020 Aug 3.
3. Yu E, Rudakou U, Krohn L, Mufti K, Ruskey JA, Asayesh F, **Estiar MA**, Spiegelman D, Surface M, Fahn S, Waters CH, Greenbaum L, Espay AJ, Dauvilliers Y, Dupré N, Rouleau GA, Hassin-Baer S, Fon EA, Alcalay RN, Gan-Or Z. Analysis of Heterozygous PRKN Variants and Copy-Number Variations in Parkinson's Disease. *Mov Dis*. 2020 Sep 24.
4. **Estiar MA**, Leveille E, Spiegelman D, Dupre N, Trempe JF, Rouleau GA, Gan-Or Z. Clinical and genetic analysis of ATP13A2 in hereditary spastic paraplegia expands the phenotype. *Mol Genet Genomic Med*. 2020; 15:e1052.
5. Leveille E<sup>1\*</sup>, **Estiar MA**<sup>1\*</sup>, Krohn L, Spiegelman D, Dionne-Laporte A, Dupré N, Trempe JF, Rouleau GA, Gan-Or Z. "SPTAN1 variants as a potential cause for autosomal recessive hereditary spastic paraplegia. *Journal of human genetics*. 2019; 1-7.
6. **Estiar MA**, Mehdipour P. ATM in breast and brain tumors: a comprehensive review. *Cancer Biol Med*. 2018 Aug;15(3):210-227.
7. Kazemi N, **Estiar MA**, Fazilaty H, Sakhinia E. Variants in GNPTAB, GNPTG and NAGPA genes are associated with stutters. *Gene*. 2018;20;647:93-100.
8. Abak A, Amini S, **Estiar MA**, Montazeri V, Sakhinia E, Abhari A. Analysis of miRNA-221 Expression Level in Tumors and Marginal Biopsies from Patients with Breast Cancer (Cross-Sectional Observational Study). *Clin Lab*. 2018 Jan 1;64(1):169-175.
9. Nemati M, Ajami N, **Estiar MA**, Rezapour S, Gavvani RR, Hashemzadeh S, Kafil HS, Sakhinia E. Deregulated expression of HDAC3 in colorectal cancer and its clinical significance. *Adv Clin Exp Med*. 2018;20.
10. **Estiar MA**, Javan F, Zekri A, Mehrzin M, Mehdipour P. Prognostic significance of MYCN gene amplification and protein expression in primary brain tumors: astrocytoma and meningioma. *Cancer Biomark*. 2017 Jul 4;19(3):341-351.
11. **Estiar MA**, Zare AA, Esmaeili R, Farahmand L, Fazilaty H, Jafari D, Samadi T, Majidzadeh-A K. Clinical significance of NDRG3 in patients with breast cancer. *Future Oncol*. 2017;13(11):961-969.

12. Bahrami T, Mokmeli S, Hossieni H, Pourpaknia R, Makani Z, Salmaninejad A, **Estiar MA**, Hossieni A, Farshbaf A. The molecular signature of breast cancer metastasis to bone. *Anticancer Drugs*. 2016;27(9):824-31.
13. **Estiar MA**, Esmaeili R, Zare AA, Farahmand L, Fazilaty H, Zekri A, Jafarbeik-Iravani N, Majidzadeh-A K. High expression of CEACAM19, a new member of carcinoembryonic antigen gene family, in patients with breast cancer. *Clin Exp Med*. 2017;17(4):547-553.
14. Zekri A, Ghaffari SH, Yaghmaie M, **Estiar MA**, Alimoghaddam K, Modarressi MH, Ghavamzadeh A. Inhibitor of Aurora Kinase B Induces Differentially Cell Death and Polyploidy via DNA Damage Response Pathways in Neurological Malignancy: Shedding New Light on the Challenge of Resistance to AZD1152-HQPA. *Mol Neurobiol*. 2016;53(3):1808-23.
15. Salmaninejad A, **Estiar MA**, Gill RK, Shih JH, Hewitt S, Jeon HS, Fukuoka J, Shilo K, Shakoori A, Jen J. Expression Analysis of p16, c-Myc, and mSin3A in Non-small Cell Lung Cancer by Computer Aided Scoring and Analysis (CASA). *Clin Lab*. 2015;61(5-6):549-59.
16. **Estiar MA**, Fazilaty H, Aslanabadi S, Seifi M, Varghaei P, Rezamand A. MYCN gene amplification in patients with neuroblastic tumors. *Cell Mol Biol*. 2014;60(3):23-8.
17. Behrouz Sharif S, Hashemzadeh S, Mousavi Ardehaie R, Eftekharsadat A, Ghojzadeh M, Mehrtash AH, **Estiar MA**, Teimoori-Toolabi L, Sakhinia E. Detection of aberrant methylated SEPT9 and NTRK3 genes in sporadic colorectal cancer patients as a potential diagnostic biomarker. *Oncol Lett*. 2016;12(6):5335-5343.
18. Pedram N, Pouladi N, Feizi MA, Montazeri V, Sakhinia E, **Estiar MA**. Analysis of the Association between MDM4 rs4245739 Single Nucleotide Polymorphism and Breast Cancer Susceptibility. *Clin Lab*. 2016;62(7):1303-1308.
19. Sharifi N, Salmaninejad A, Ferdosi S, Bajestani AN, Khaleghiyani M, **Estiar MA**, Jamali M, Nowroozi MR, Shakoori A. HER2 gene amplification in patients with prostate cancer: Evaluating a CISH-based method. *Oncol Lett*. 2016;12(6):4651-4658.
20. Sakhinia E, Goodchild J, Lia Patricia M, Radford J, **Estiar MA**, Sakhinia M, Byers R. Comparative Quantitation of Lymphoma Gene Signatures in Parallel Formalin Fixed Paraffin Embedded and Frozen Tissue Lymph Nodes. *Clin Exp Pathol*. 2012;2(7):1000128.
21. Rostamizadeh L, Fakhrijou A, Montazeri V, **Estiar MA**, Naghavi-Behzad M, Hosseini S, Sakhinia M, Sakhinia E. Bcl-2 gene expression in human breast cancers in Iran. *Asian Pac J Cancer Prev*. 2013;14(7):4209-14.
22. Soltani M, Nemati M, Maralani M, **Estiar MA**, Andalib S, Fardiazar Z, Sakhinia E. Cell-free fetal DNA in amniotic fluid supernatant for prenatal diagnosis. *Cell Mol Biol*. 2016;62(4):14-7.
23. Kheiroddin P, Rasihashemi SZ, **Estiar MA**, Mahmudian B, Halimi M, Mousavi F, Nemati M, Sakhinia E. RET Gene Analysis in Patients with Medullary Thyroid Carcinoma. *Clin Lab*. 2016;62(5):871-6.
24. Enrahi L, Tabrizi MT, Gharehsouran J, Ardebili SM, **Estiar MA**. Spectrum of MYBPC3 Gene Mutations in Patients with Hypertrophic Cardiomyopathy, Reporting Two Novel Mutations from North-West of Iran. *Clin Lab*. 2016;62(5):757-64.
25. Salmaninejad A, Ghadami S, Dizaji MZ, Golchehre Z, **Estiar MA**, Zamani MR, Ebrahimzadeh-Vesal R, Nowroozi MR, Shakoori A. Molecular Characterization of KRAS, BRAF, and EGFR Genes in Cases with Prostatic Adenocarcinoma; Reporting Bioinformatics Description and Recurrent Mutations. *Clin Lab*. 2015;61(7):749-59.
26. Sakhinia E, **Estiar MA**, Andalib S, Rezamand A. Expression profiling of microarray gene signatures in acute and chronic myeloid leukaemia in human bone marrow. *Iran J Ped Hematol Oncol*. 2015;5(1):27-42.
27. Ghorbian S, Jahanzad I, **Estiar MA**, Ziae JE, Asvadi-Kermani I, Andalib S, Javadi GR, Sakhinia E. Molecular Analysis of IGH and Incomplete IGH D-J Clonality Gene Rearrangements in Hodgkin Lymphoma Malignancies. *Clin Lab*. 2015;61(8):951-5.
28. Forouzanfar K, Seifi M, Hashemi-Gorji F, Karimi N, **Estiar MA**, Karimoei M, Sakhinia E, Karimipour M, Ghergherehchi R. Mutation analysis of the CYP21A2 gene in congenital adrenal hyperplasia. *Cell Mol Biol*. 2015;61(4):51-5.
29. Hosseini A, Shanebandi D, **Estiar MA**, Gholizadeh S, Khabbazi A, Khodadadi H, Sakhinia E, Babaloo Z. A Single Nucleotide Polymorphism in the FOXP3 Gene Associated with Behçet's Disease in an Iranian Population. *Clin Lab*. 2015;61(12):1897-903.
30. Ebrahimzadeh-Vesal R, Shokrgozar MA, Nayernia K, Teimoori-Toolabi L, **Estiar MA**, Miryounesi M, Nourashrafeddin S, Modarressi MH. MicroRNA profiling during germline differentiation of mouse embryonic stem cells. *Cell Mol Biol*. 2015;61(3):84-91.
31. Hosseini S, Hashemzadeh S, **Estiar MA**, Ebrahimzadeh R, Fakhree MB, Yousefi B, Sheikholeslami S, Modarresi MH, Sakhinia E. Expression Analysis of Aurora-C and Survivin, Two Testis-Specific Genes, in Patients with Colorectal Cancer. *Clin Lab*. 2015;61(5-6):475-80.
32. Montazami N, Kheir Andish M, Majidi J, Yousefi M, Yousefi B, Mohamadnejad L, Shanebandi D, **Estiar MA**, Khaze V, Mansoori B, Baghbani E, Baradaran B. siRNA-mediated silencing of MDR1 reverses the resistance to oxaliplatin in SW480/OxR colon cancer cells. *Cell Mol Biol*. 2015;61(2):98-103.
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34. Karimi M, Solati N, Ghasemi A, **Estiar MA**, Hashemkhani M, Kiani P, Mohamed E, Saeidi A, Taheri M, Avci P, Aref AR, Amiri M, Baniasadi F, Hamblin MR. Carbon nanotubes part II: a remarkable carrier for drug and gene delivery. *Expert Opin Drug Deliv*. 2015;12(7):1089-105.
35. Karimi M, Solati N, Amiri M, Mirshekari H, Mohamed E, Taheri M, Hashemkhani M, Saeidi A, **Estiar MA**, Kiani P, Ghasemi A, Basri SM, Aref AR, Hamblin MR. Carbon nanotubes part I: preparation of a novel and versatile drug-delivery vehicle. *Expert Opin Drug Deliv*. 2015;12(7):1071-87.
36. Tohidirad M, **Estiar MA**, Rezamand A, Ghorbian S, Andalib S, Jahanzad I, Bahrami T, Sakhinia E. BCL-1 Gene Rearrangements in Iranian Non-Hodgkin Lymphoma Patients. *Glob J Health Sci*. 2016;8(8):53396.
37. Moharrami G, Ghorbian S, Seifi M, **Estiar MA**, Fakhrijou A, Sakhinia M, Sakhinia E. Detection of immunoglobulin IGH gene rearrangements on formalin-fixed, paraffin embedded tissue in lymphoid malignancies. *Cell Mol Biol*. 2014;60(4):43-7.

38. Karami H, Baradaran B, Esfahani A, **Estiar MA**, Naghavi-Behzad M, Sakhinia M, Sakhinia E. siRNA-mediated silencing of survivin inhibits proliferation and enhances etoposide chemosensitivity in acute myeloid leukemia cells. *Asian Pac J Cancer Prev*. 2013;14(12):7719-24.
39. Saleh P, **Asghari-Estiar M**, Asgarlou Z, Shokrvash B, Abbasalizadeh F, Sakhinia E, Mallah F, Piri R, Naghavi-Behzad M. Early detection of *Toxoplasma gondii* by real-time polymerase chain reaction methods in patients with recurrent spontaneous abortions. *J Anal Res Clin Med*. 2014;2(4):193-6.
40. Mazani M, Argani H, Rashtchizadeh N, Ghorbanihaghjo A, Hamdi A, **Estiar MA**, Nezami N. Effects of zinc supplementation on antioxidant status and lipid peroxidation in hemodialysis patients. *J Ren Nutr*. 2013;23(3):180-4.
41. Falsafi P, Taghavi-Zenouz A, Khorshidi-Khiyavi R, Nezami N, **Estiar MA\***. A Case of Tuberos Sclerosis Without Multiorgan Involvement. *Glob J Health Sci*. 2015;7(5):124-31.
42. Mehdipour P, Javan J, **Estiar MA**, Khaleghian M, Novin N, et al. Protein Expression of ETS2 in Alzheimer's Disease and Down 's syndrome as a Personalized Insight: One Gene, One Feature in Common, Diverse-Function-and Diseases. *SRL Neuro Neurosur*. 2017;3(1):001-007.
43. Khabbazi A, Zolrahim F, **Asghari Estiar M**, Sakhinia E, Kolahi S. Molecular Analysis of MEFV Gene Polymorphisms and Mutations in Iranian Azeri Patients with Rheumatoid Arthritis. *Iran J Public Health*. 2016;45(10):1383-1385.
44. Abdollahi-Fakhim S, **Asghari Estiar M**, Varghaei P, Alizadeh Sharafi M, Sakhinia M, Sakhinia E. Common Mutations of the Methylenetetrahydrofolate Reductase (MTHFR) Gene in Non-Syndromic Cleft Lips and Palates Children in North-West of Iran. *Iran J Otorhinolaryngol*. 2015;27(78):7-14.
45. Poursadegh Zonouzi A, Chaparzadeh N, **Asghari Estiar M**, Mehrzad Sadaghiani M, Farzadi L, Ghasemzadeh A, Sakhinia M, Sakhinia E. Methylenetetrahydrofolate Reductase C677T and A1298C Mutations in Women with Recurrent Spontaneous Abortions in the Northwest of Iran. *ISRN Obstet Gynecol*. 2012;945486.
46. Kolahi S, Khabbazi A, Khodadadi H, **Estiar MA**, Hajjaliloo M, Emrahi L, Sakhinia E. Vitamin D receptor gene polymorphisms in Iranian Azary patients with Behçet's disease. *Scand J Rheumatol*. 2015;44(2):163-7.
47. Hashemzadeh S, Arabzadeh AA, **Estiar MA**, Sakhinia M, Mesbahi N, Emrahi L, Ghojazadeh M, Sakhinia E. Clinical utility of measuring expression levels of Stanniocalcin 2 in patients with colorectal cancer. *Med Oncol*. 2014;31(10):237.
48. Amini S, Abak A, Estiar MA, Montazeri V, Abhari A, Sakhinia E. Expression Analysis of MicroRNA-222 in Breast Cancer. *Clin Lab*. 2018 Apr 1;64(4):491-496.
49. Mousavi A, Hashemzadeh S, Bahrami T, Estiar MA, Feizi MAH, Pouladi N, Rostamizadeh L, Sakhinia E. Expression Patterns of CXCL12 and its Receptor in Colorectal Carcinoma. *Clin Lab*. 2018 May 1;64(5):871-876.

## **BOOK CHAPTERS**

Ali Zekri, **Mehrdad Asghari Estiar** and Parvin Mehdipour. *Frontiers in Anti-Cancer Drug Discovery*. Chapter 5: Cancer Stem Cells, Models, Drugs and Future, Prospective. Bentham Press. 2015, 135-156.

Pooneh Mokarram, **Mehrdad Asghari Estiar** and Hassan Ashktorab. *Epigenetics Territory and Cancer*. Chapter 13: Methylation in Colorectal Cancer. Springer Press. 2015.