Curriculum Vitae



Personal Details:

Given Name: Fatemeh

Last name: Amiri

❖ Gender: Female

❖ Nationality: Iranian

❖ Date of Birth: March 20th 1977

Born in: Saveh, Iran

*** Hometown:** Saveh, Iran

Contact Information:

Tel: 081-38381037 (109)

Email:amirif2012@gmail.com, f.amiri@umsha.ac.ir

Mailing Address: Department of Medical Laboratory Sciences, School of Paramedicine, Hamadan University of Medical Sciences, Infront of Mardom Park, Shahid Fahmideh Blve, Mahdiyeh Ave, Hamadan, Iran.

Education Courses and Qualification:

- 1- High school of natural sciences from 1991 to 1995 in Saveh, Iran.
- 2- Academic Background (Higher education):
- ❖ AD of laboratory sciences from 1996 to 1998 in Kashan University of Medical Sciences, Kashan, Iran. GPA: 18.09 out of 20.

- BSc of laboratory sciences from 1998 to 2000 in Shiraz University of Medical Sciences, Shiraz, Iran. GPA: 17.82 out of 20.
- MSc of laboratory hematology and blood banking from 2001 to 2003 in Iranian Blood Transfusion organization (IBTO), Tehran, Iran. GPA: 18.43 out of 20.
- Ph.D of laboratory hematology and blood banking from 2009 to 2014 in High Institute for Research and Education in Transfusion Medicine, Tehran, Iran. GPA: 17.76 out of 20.

Research Interests:

- Mesenchymal stem cell
- Hematopoietic stem cell
- Cell therapy
- Molecular hematology
- Leukemia
- Blood components preparation and qualification
- Platelets
- Immunohematology
- Transfusion medicine and blood banking

Publications:

Papers:

1- Rafiee M, Amiri F, Mohammadi MH, Abbas Hajifathali A. MicroRNA-125b as a valuable predictive marker for outcome after autologous hematopoietic stem cell transplantation. BMC Cancer (2023) 23:202 https://doi.org/10.1186/s12885-023-10665-0

- 2- Molaei S, Amiri F, Salimi R, Ferdowsi Sh, Bahadori M. Therapeutic effects of mesenchymal stem cells-conditioned medium derived from suspension cultivation or silymarin on liver failure mice.
 Molecular Biology Reports, 2022, https://doi.org/10.1007/s11033-022-07785-4
- 1- Amiri F, Mohammadi Dahaj M, Helmi Siasi N, Deyhim MR.Treatment of platelet concentrates with the L-carnitine modulates platelets oxidative stress and platelet apoptosis due to mitochondrial reactive oxygen species reduction and reducing cytochrome C release during storage. Journal of Thrombosis and Thrombolysis, 2021; 51:277–285.
- 2- Amiri F, Kiani AA, Bahadori M, Habibi Roudkenar M. Co-culture of mesenchymal stem cell spheres with hematopoietic stem cells under hypoxia: a cost-effective method to maintain self-renewal and homing marker expression. Molecular Biology Reports, 2021, https://doi.org/10.1007/s11033-021-06912-x
- 3- Asgarpour K, Shojaei Z, **Amiri F**, Ai J, Mahjoubin-Tehran M, Ghasemi F. Exosomal microRNAs derived from mesenchymal stem cells: cell-

- to-cell messages. Cell Communication and Signaling, 2020; 18:149-160.
- 4- Meyari A, Mousavi E, Amiri F*, Rostami Moez M, Alafchi. The Effect of Including Research Educational Course in Program Curriculum of Laboratory Sciences in Hamadan University of Medical Sciences.
 Research in Medical Education. 2020:12 (4); 40-47.
- 5- Afshari M, Amiri F*, Seyedi MR, Biglari M, Jambozorg H.Evaluation of alloantibodies in thalassemia patients referred to Hamadan Besat hospital in 2019. Sci J Iran Blood Transfus Organ, 2021;18(3): 187-195
- 6- Amiri F, Jambozorg H, Biglari M, Mohammadi A, Afshari M, Seyedi MR.Survey on the blood transfusion-related reactions in blood recipients referred to Hamadan hospitals in 2018-2019. Sci J Iran Blood Transfus Organ, 2021;18(2): 87-96
 - 7- Seyedi MR, Afshari M, Amiri F*, Daneshyar F, Biglari M, Jambozorg H. Survey on non-Conformities Reported in Public and Private Medical Laboratories of Hamadan Province. Paramedical Sciences and Military Health, 2021; 15(4): 20-28
 - 8- Biglari M, Jambozorg H, **Amiri F***, Tavakoli S, Seyedi MR, Afshari M. Survey on Laboratory Test Quality Control Establishment in Public

- and Private Medical Laboratories in Hamedan Province. Paramedical Sciences and Military Health, 2020; 15(3):21-30
- 9- Habibi Roudkenar M, Halabian R, Abdul Tehrani H, Amiri F, Jahanian-Najafabadi A, Mohammadi Roushandeh A, Abbasi-Malati Z, kuwahara Y. Lipocalin 2 enhances mesenchymal stem cell-based cell therapy in acute kidney injury rat model. Cytotechnology, 2018; 70:103–117
- 10- Zahra Abbasi-Malati · **Fatemeh Amiri** · Mahshid Mohammadipour · Mehryar Habibi Roudkenar. HEK293 Cells Overexpressing Nuclear Factor E2-Related Factor-2 Improve Expression of Recombinant Coagulation Factor VII. Molecular Biotechnology, 2019; 61:317–324
- 11- Shirin Ferdowsia, Ali Akbar Pourfathollah, **Fatemeh Amiri**, Mohammad Hessam Rafieea, Afsaneh Aghaeia. Evaluation of anticancer activity of α-defensins purified from neutrophils trapped in leukoreduction filters. Life Sciences, 2019; 224: 249–254.
- 12- Ali Hosseini, **Fatemeh Amiri**, Fereshteh Khalighi, Amaneh Mohammadi Roushandeh, Yoshikazu Kuwahara, Hamed Bashiri, et al. Cell Survival Effects of Autophagy Regulation on Umbilical Cord-Derived Mesenchymal Stem Cells Following Exposure to Oxidative Stress. *Iran J Med Sci*, 2019; 44 (6): 493-500.
- 13- Bashiri H, **Amiri F**, Hosseini A, Hamidi M, Mohammadi Roushandeh A, Kuwahara Y, Jalili MA, Habibi Roudkenar M. Dual Preconditioning: A Novel Strategy to Withstand Mesenchymal Stem

- Cells against Harsh Microenvironments. *Adv Pharm Bull*, 2018, 8(3), 465-470 doi: 10.15171/apb.2018.054
- Movahed M, Roudkenar MH, Bahadori M, Mohammadipour M, Jalili MA, Amiri F*. Establishment of Stable CHO Cell Line Expressing Recombinant Human Haptoglobin: Toward New Haptoglobin-Based Therapeutics. Iran J Sci Technol Trans Sci (2018) 42:1097–1103. DOI 10.1007/s40995-017-0381-z.
- 15- Bahadori M, Amiri F, Movahed M, Roushandeh AM, Roudkenar MH. Establishment of Stable Chinese Hamster Ovary Cell Line Capable of Expressing Human Recombinant Hemopexin: A PromisingTherapeutic Modality Against Hemolytic Anemia. Gene Cell Tissue. 2017 April; 4(2):e13360.
- 16-Roudkenar MH. Halabian R, Tehrani Η, Amiri F, Jahanian-Najafabadi A, Mohammadi Roushandeh A, et al. Lipocalin 2 enhances mesenchymal stem cell-based cell therapy in injury model. acute kidney rat Cytotechnology. 2018;70(1):103-117.
- 17- **Fatemeh Amiri,** Sedigheh Molaei, Marzie Bahadori, Fatemeh Nasiri, Mohammad Reza Deyhim, Mohammad Ali Jalili, et al. Autophagy-Modulated Human Bone Marrow-Derived Mesenchymal Stem Cells Accelerate Liver Restoration in Mouse Models of Acute Liver Failure. Iranian Biomedical Journal, 2016; 20(3): 135-144.
- 18- Fatemeh Amiri, Raheleh Halabian, Mozhgan Dehgan Harati, Marzie Bahadori, Ahmad Mehdipour, Amaneh Mohammadi Roushandeh, et al. Positive Selection of Wharton's Jelly-derived CD105+ Cells by MACS Technique and Their Subsequent Cultivation

- under Suspension Culture Condition: A Simple, Versatile Culturing Method to Enhance the Multipotentiality of Mesenchymal Stem Cells. Hematology, 2015; 20 (4):208-216.
- 19- **Fatemeh Amiri**, Raheleh Halabian, Morteza Salimian, Mohammad Ali Shokrgozar, Masoud Soleimani, Ali Jahanian-Najafabadi, et al. Induction of multipotency in umbilical cordderived mesenchymal stem cells cultivated under suspension conditions. Cell Stress and Chaperones. 2014, 19:657-666.
- 20- **Fatemeh Amiri,** Ali Jahanian-Najafabadi, Mehryar Habibi Roudkenar. In vitro augmentation of mesenchymal stem cells viability in stressful microenvironment. Cell Stress and Chaperons. 2015, 20: 237-251.
- 21- Fateme Zhaleh, **Fatemeh Amiri**, Mohammad Mohammadzadeh-Vardin, Marzie Bahadori, Mitra Dehghan Harati, Mehryar Habibi Roudkenar, et al. factor erythroid-2 related factor 2 overexpressed mesenchymal stem cells transplantation, improves renal function, decreases injuries markers and increases repair markers in glycerol-induced Acute kidney injury rats. Iran J Basic Med Sci 2016; 19:323-329.
- 22- Sedigheh Molaei, Mehryar Habibi Roudkenar, Fatemeh Amiri, Mozhgan Dehghan Harati, Marzie Bahadori, Fatemeh Jaleh, et al. Down-regulation of the autophagy gene, ATG7, protects bone marrow-derived mesenchymal stem cells from stressful conditions. Blood Res 2015;50:80-6.
- 23- Bahareh Bahmani , **Fatemeh Amiri** , Amaneh Mohammadi Roushandeh , Marzie Bahadori , Mozhgan Dehghan Harati , Mehryar

- Habibi Roudkenar. The Lcn2-engineered HEK-293 cells show senescence under stressful condition. Iran J Basic Med Sci 2015; 18:459-464.
- 24- Mozhgan Dehghan Harati, **Fatemeh Amiri**, Fatemeh Jaleh, Ahmad Mehdipour, Mitra Dehghan Harati, Sedigheh, et al. Targeting delivery of lipocalin 2-engineered mesenchymal stem cells to colon cancer in order to inhibit liver metastasisin nude mice. Tumor Biol. (2015) 36:6011–6018.
- 25- Ali Samadi kuchaksaraei, Ahmad Mehdipour, Mehryar Habibi Roudkenar, Javad Verdi, Mohammad Taghi Joghataei, Kamran As'adi, **Fatemeh Amiri**, et al. A Dermal Equivalent Engineered with TGF-b3 Expressing Bone Marrow Stromal Cells and Amniotic Membrane: Cosmetic Healing of Full-Thickness Skin Wounds in Rats. Artificial Organs 2016, 40(12):E266–E279.
- 26- Helmi Siasi N, Deyhim M.R., **Amiri F**, Amini Kafi-Abad S. The antioxidant impact of the L-carnitine (LC) in platelet concentrates during storage. Sci J Iran Blood Transfus Organ 2017; 14(3): 175-187.
- 27- Mehrabi Habibabadi H, Amiri F, Moslemi E, Habibi Roudkenar M, Jalili M. Over expression of Nrf2 in Umbilical Cordderived Mesenchymal Stem Cells Up regulates Cytoprotective Genes, TXNRD1 and GCLC. IJBC 2015; 7(3): 155-162.
- 28- Bahareh Bahmani, Mehryar Habibi Roudkenar, Raheleh Halabian, Ali Jahanian-Najafabadi, <u>Fatemeh Amiri</u>, Mohammad Ali Jalili. Lipocalin 2 decreases senescence of bone marrow-derived

- mesenchymal stem cells under sub-lethal doses of oxidative stress. Cell Stress and Chaperones. 2014, 19: 685-693.
- 29- Nasiri F, **Amiri F**, Mohammadipour M, Molaei S, Habibi Roudkenar M, Jalili MA. H2O2-preconditioned mesenchymal stem cell regenerative effects on acute liver failure mice. Sci Iran Blood Transfus Organ 2015; 12(2): 124-111.
- 30- Soltani F, **Amiri F**, Kheirandish M, Mohammadipour M, Jalili M,Habibi Roudkenar M. Cell survival evaluation of mesenchaymal stem cells cultivated in the presense of secretome of HIF- 1α /Nrf2-engineered-MSC. Sci Iran Blood Transfus Organ 2016; 12(4): 318-330.
- Jaleh F, Amiri F, Dehghan Harati M, Habibi Roudkenar M, Jalili MA. Evaluation of the repair effects of MSCs cultivated with secretome of Nrf2 engineered MSCs on acute kidney injury in rats. Sci Iran Blood Transfus Organ 2017; 13(4): 291-303.
- 32- Mostafa Paridar, Naser Amirizadeh, Mahyar Habibi Roudkenar, **Fatemeh Amiri**, Hassan Abolghasemi , Mohammad Ali Jalili. Expression of Recombinant Coagulation Factor IX in Human Amniotic Membrane-derived Mesenchymal Stem Cells: A New Strategy to Gene Therapy of Hemophilia B.IJBC. 2014, 6 (3):133-141. **Abstracts:**
- 1- HIF OVER EXPRESSING CHO CELLS: POSSIBLE STRATEGY TO IMPROVE EXPRESSION OF RECOMBINANT COAGULATION FACTOR VII. Dec, 2021, AABB & AATM. Jaipur, India. *Oral presentation*.

- 2- USING OF EXOSOMAL miR-15b and miR-15a DERIVED FROM MESENCHYMAL STEM CELLS IN PROGRESSION OF DISEASES. Dec, 2021, AABB & AATM, Jaipur, India. *Oral presentation*.
- 3- L-carnitine modulated oxidative stress during storage time of platelets due to enhancement of their total antioxidant capacity. International congress of laboratory and clinic, Jan, 2019, Tehran, Iran. *Oral presentation*.
- 4- Different strategies for manipulation of mesenchymal stem cells in vitro to enhance their potentialities. International congress of laboratory and clinic, Jan, 2019, Tehran, Iran. *Oral presentation*.
- 5- Implementation of EQA Program for Coagulation Factor VIII assay in Iranian Blood Transfusion Organization, The 4th International Congress of Transfusion Medicine, Sep, 2018, Tehran, Iran. *Oral presentation*
- 6- Patient Blood Management, Hemovigilance seminar, Sanandaj-Iran.
 Oral presentation.
- 7- Trypsin Induced Multipotency in umbilical cord-derived mesenchymal stem cells 14th of ISBT Congress, Jun 2014 Seoul, South korea. *Oral presentation*
- 8- Flowcytometric Detection of Anti-HLA Antibodies in patients with hematological disorders received platelet concentrates. Immunological aspect of platelet transfusion.26/6/85. IBTO, Tehran-Iran. *Oral presentation*.
- 9- The effect of L-Carnitine on Platelet Oxidative Damage and Platelet Lipid Peroxidation During Storage of Platelet Concentrate. ISBT Congress, 2016, Dubai.as poster.

- 10- Nrf-2-engeneered Mesenchymal stem cells: Magic Cells for treatment of Acute Kidney Injury Invivo. AATM (AABB) Congress, 2016, India. as poster.
- 11- Prevalence of Transfusion-transmissible infections among blood donors in Kurdistan Province, Iran from 2011 to 2014. AATM (AABB) Congress, 2016, India. as poster.
- 12- Nuclear Factor E2-related Factor-engineered mesenchymal stem cells Ameliorate rat acute kidney Injury.14th of ISBT Congress, Jun 2014 Seoul, South korea. *As poster*
- Transmitted Infections (HIV, HBV and HCV) in Iranian Repeat Blood Donors. The 3rd International Congress of Transfusion Medicine, Evidence-Based Use of Blood Components and Plasma Derived Medicines, Dec 15-17, 2015, Tehran, Iran. as poster.
- 14- Evaluation of Coagulation Factor VIII Activity and Stability in Freeze-dried Fresh Frozen Plasma. The 3rd International Congress of Transfusion Medicine, Evidence-Based Use of Blood Components and Plasma Derived Medicines, Dec 15-17, 2015, Tehran, Iran. as poster.
- 15- Risk Assessment of the Plasma Blast Freezers Validation Procedure: a new Experience in Iranian Blood Establishments. The 3rd International Congress of Transfusion Medicine, Evidence-Based Use of Blood Components and Plasma Derived Medicines, Dec 15-17, 2015, Tehran, Iran. as poster.
- 16- Suspension Cultivation of Wharton's Jelly-derivedMesenchymal Stem Cells Improves their Supportive Effects on

- Hematopoietic Stem Cells. International congress on stem cell & regenerative medicine, May 20-22, 2015, Mashhad, Iran. **as poster.**
- 17- Nuclear factor e2-related factor 2- engineered mesenchymal stem cells ameliorate rat acute kidney injury. International Society of Blood Transfusion (ISBT), 2014, Seoul, Korea. **as poster.**
- 18- Autophagy suppression improves regeneration potentialities of human bone marrow derived mesenchymal stem cells in acute liver failure-induced mice. The 8th International congress of laboratory and clinic, Feb 6-8, 2016, Tehran, Iran. **as poster.**
- 19- Hemopexin, an iron-sequestering protein, improves cell viability in reactive oxygen species stressful conditions. The 8th International congress of laboratory and clinic. Feb 6-8, 2016, Tehran, Iran. **as poster.**
- 20- Prevalence of red blood cell alloantibodies in blood donors of Zanjan blood transfusion center. The 8th International congress of laboratory and clinic. Feb 6-8, 2016, Tehran, Iran. **as poster.**
- 21- Improvement of Paracrine potentialities of Mesenchymal stem cells using simple suspension culturing method. MPHBS. 2016, Tehran, Iran. as poster.
- 22- Enhancement of mesenchymal stem cells liver regeneration potentialities in acute liver failure by authophagy suppression. MPHBS. 2016, Tehran, Iran. . as poster.
- 23- Flowcytometric Detection of Anti HLA Antibodies in Patients with Hematological Disorder. International Congress of Immunodeficiency Asthma, Feb 2005, Tehran-Iran. as poster.

- 24- Flow cytometric evaluation of platelet specific antibodies in patients with platelet refractoriness. Ijhobmt vol.1, No.3 and supp.
 1; Nov. 2004. as poster.
- 25- Anti-histocompatibility antigens class I antibodies in patients with hematological disorders who received platelets concentrates. Ijhobmt vol.1, No.3 and supp. 1; Nov. 2004.as poster.
- 26- Comparison of Flowcytometry and PRA methods in detection of Anti-HLA I Antibodies. 4th Balkan Congress of Immunology-Sep 2004- Turkey. **as poster.**

Projects:

- 1- Development students' learning using Blended learning Method for Practical Course of Immunohematology of Laboratory Sciences, as supervisor, Hamadan University of medical sciences, 2022 till now
- 2- Correlation of red blood cell indices with CRP and IL-6 in Covid-19 patients admitted to Hamedan hospitals in 2020,2021, as supervisor, Hamadan University of medical sciences, 2022-2023.
- 3- The angiogenic role of platelets in the physiologic, pathologic, and tumorogenic conditions, as supervisor, Hamadan University of medical sciences, 2022-2023.
- 4- Evaluation of the correlation between serum concentration of selenium and zinc and antioxidant activity in the patients with anemia, as supervisor, Hamadan University of medical sciences, 2022 till now.
- 5- Review of bidirectional relationship between malignant hematologic cells and mesenchymal stem cells and its mechanisms, as supervisor, Hamadan University of medical sciences, 2022-2023.

- 6- Survey on the effective parameters on improvement of mesenchymal stem cells and hemetopoietic stem cell on co-culture system. as supervisor, Hamadan University of medical sciences, 2022 till now.
- 7- Correlation between expression of miR-125b, miR-126, miR-150, miR-155 in plasma and extra-cellular vesicles with outcome of transplantation in multiple myloma and lymphoma patients receiving autologous hematopoietic stem cell transplantation. as supervisor, Hamadan University of medical sciences, 2022 till now.
- 8- Design, implementation and evaluation of professional ethics lesson in undergraduate laboratory sciences students in hamadan university of medical sciences in 2020, as supervisor, Hamadan University of medical sciences, 2021-2022.
- 9- Evaluation of supportive effects of mesenchymal steme cells on hematopoietic stem cells under co-culture condition in adherent or non-adherent phase, as supervisor, Hamadan University of medical sciences, 2021-2022.
- stem cell-conditioned medium-derived from suspension cultivation on animal models of acute liver failure, as supervisor, Hamadan University of medical sciences, 2021-2023.
- **11-** Establishment of a CHO Cell line for Expression of Recombinant Human Haptoglobin, as supervisor. IBTO. 2015-2016.
- **12-** Establishment of a stable CHO Cell line for Expression of Recombinant Human Hemopexin, **as supervisior**. IBTO. 2015-2016

- **13-** Survey of antioxidant effects of L-carnitine on platelet concentrates during storage time, **as supervisor.** IBTO. 2016-2017.
- 14- Assessment of potential enhancement of expression of recombinant FVII in modified Nrf2-HEK293 cells, as supervisor. IBTO. 2016-2017
- **15-** Evaluation effect of L-carnitin as an antioxidant on free radicals ,lipid peroxidation and platelet apoptosis in platelet concentrates during storage. **as supervisor.** IBTO. 2016-2017.
- 16- Isolation and characterization of a sub population of cord blood-derived mesenchymal stem cells with ability to differentiate to three germ layers without induction. as Ph.D thesis. IBTO. 2011-2014.
- **17-** Expression of recombinant FIX in amniotic membrane mesenchymal stem cells. IBTO. 2011-2014.
- **18-** "Flowcytometric detection of Anti-HLA Antibodies in patients with hematological disorders". **as MSc thesis.** IBTO. 2002-2003.
- **19-** "Chemiluminescence's detection of Anti-Top and Anti-thyroglobulin in Infertile women". Avesina research Institute. 2004-2005.
- "Survey of HIV prevalence in Drug addicts" I.B.T.O. 1383
- 21- "Comparison between two HIV kits (Pasteur and Biotest) Results" IBTO. 2003-2005.
- 22- "Fluorescence and flowcytometric detection of anti-platelet antibodies in patients with hematological disorders" IBTO. 200-2003.

in Blood groups genotype determination with Molecular method in patients with Thalassemia in Tehran Thalassemia Clinic (Adult)". IBTO.2005-2007.

Participation in Workshop and Seminar:

- 1- International congress of laboratory and clinic, Jan, 2019, Tehran, Iran.
- 2- 4th International Congress of Transfusion Medicine, Sep, 2018, Tehran, Iran.
- 3- 35th International ISBT Congress, June, 2018, Toronto, Canada.
- 4- AATM (AABB) Congress, 2016, Banglor, India
- 5- 3rd International Congress of Transfusion Medicine, Evidence-Based Use of Blood Components and Plasma Derived Medicines, Dec 15-17, 2015, Tehran, Iran.
- 6- GMP work shop, IBTO with WHO collaboration, March, 2016, <u>as</u> trainer
- 7- International congress on stem cell & regenerative medicine, May 20-22, 2015, Mashhad, Iran.
- 8- The 8th International congress of laboratory and clinic, Feb 6-8, 2016, Tehran, Iran.
- 9- MPHBS. 2016, Tehran, Iran.
- 10- "IT, Internet and Software in laboratory sciences" Workshop. 2002.10.21. Razi hall. Tehran Iran.
- 11- "Inheritance Blood Disorders" Seminar . 2003.09.07-08. Imam Khomeini hospital. Tehran – Iran.

- 12- "9th Asian-Australian Congress Bone marrow Transplantation" Congress (1103647). 2003.08.28-30 Rahbaran Hall. Tehran- Iran.
- 13- "Statistic Methods in TQM" Workshop . 2003.10.13. Razi hall Tehran-Iran.
- 14- "Scientific-Educational AIDS" Workshop. 2003.12.12. Imam khomeini hall. Tehran-Iran.
- 15- "The first International Congress of Immunodeficiency diseases" 2003.12.10-12. Imam Khomeini hall. Tehran-Iran.
- 16- "4th Congress of Quality improvement in medical diagnosis laboratory service".2004.11.12-14. Razi hall. Tehran-Iran.
- 17- "Immunologic aspects of Human Stem Cell Therapy ". Workshop 2004.12.15-16. IBTO. Tehran-Iran.
- 18- "Safety standards methods". Workshop. 2004.04.09. IBTO. Tehran-Iran.
- 19- "Quality Control Re-education". Workshop. 2004.10.29. IBTO.
 Tehran-Iran.
- 20- "Routine Department Re-education". Workshop. 2005.09.13.

 IBTO Tehran-Iran.
- 21- "Platelet Immunology ".Seminar 2005.06.26-27. IBTO. Tehran-Iran.
- 22- "Blood transfusion in thalassemia patients" Seminar. 2005.04.22. IBTO. Tehran-Iran.
- 23- "Sperm preparation" Workshop. 2005.11.05. Avesina research Institute .Tehran-Iran.
- 24- "TQM ISO 9001-2000 Training". Workshop. 2005.04.30. I.B.TO. Tehran-Iran.

- 25- "TQM ISO 2000 Training". Workshop 2005.10.01 Avesina research Institute . Tehran-Iran.
- 26- "ART & prenatology". Workshop. 2005.12.20 Avesina research Institute.
- 27- "Infracted myocardium Repair with Stem Cells". Workshop. 2005.07.24. Avesina research Institute.
- 28- "Gene therapy: options for Parkinson's disease". Work shop. 2005.10.11. Avesina research Institute.
- 29- "Monoclonal antibody production". Workshop.2005.09.23-24

 Avesina research Institute.
- 30- "Cancer and DNA Repair". Workshop. 2006.05.08. Avesina research Institute.
- 31- "Immunehistochemistry". Workshop.2006.06.01. Avesina research Institute.
- 32- "Nanomedicine" Workshop. March-June 2007. Shariati Hospital Research Development Center. Tehran Iran.
- 33- "Controversies in Assisted Reproductive Technology (ART) Failure". January 2007. Avesian research Institute. Tehran-Iran.
- 34- "Weekly Conference of Clinical Genetics".

 Conference.1387.03.08.Cancer Institute. Tehran -Iran.
- 35- "Novel Methodes in Hematology and Coagulation laboratory". Workshop.1387.05.21. Imam Khomeini hospital. Tehran Iran.
- 36- "Molecular Methodes in Laboratory". Workshop. 1387.11.12-15. Imam Khomeini hospital. Tehran Iran.

- 37- "Clinical Indication of Blood and its Components". Seminar.1388.04.1-3. Imam Khomeini hospital. Tehran Iran.
- 38- "Transfusion Medicine" .seminar.1388.02.28-30. Imam Khomeini hospital. Tehran – Iran.
- 39- "Blood Banking". Workshop. 1388.05.17-28. Imam Khomeini hospital. Tehran Iran.
- 40- Principle Of article, Workshop .Apr 2014, Shahid beheshti Jahad, Tehran Iran.
- 41- "Controversies in Diagnostic Laboratory Testes in Viral Hepatites". Seminar. 1388.07.29-30. Pasture Institute. Tehran Iran.
- 42- "2th International Congress of Transfusion Medicine &Plasma Industry".Congress.1390.02.20-21.IBTO. Tehran –Iran

Techniques:

- Hemoglobin Electrophoresis, Hemoglobin A2 chromatography
- ❖ Pathological Staining (H & E) technique
- ELISA, RIA, Chemiluminescence technique
- Bon Marrow Smear Preparation
- Antibody Detection &Identification Methods (Pooled and Panel),
 CDC (PRA) techniques
- RIBA test, Confirmatory test, Western blot, Protein Electrophoresis (SDS-page)
- ❖ Immunohistochemistry (IHC), Immunocytochemistry (ICC) technique
- Cell Culture & Sub culture, Stem Cell Culture, Stem Cell Freezing & De freezing

- Isolation of Mesenchymal Stem Cells (MSCs) from Human Bon marrow, Umbilical cord Blood and Umbilical Cord Tissue and Amniotic Membrane
- Isolation of Mesenchymal Stem Cells (MSCs) from Rat and mouse Bone marrow
- MTT Assay, WST assay, DNA Extraction, RNA Extraction, Protein Extraction
- ❖ PCR & RT-PCR
- MACS techniques to cell separation.
- ❖ Mononuclear Cell Isolation from Cord & Peripheral blood
- Cloning and sub cloning: Preparation of Competent Cell & bacteria, Plasmid Extraction, PCR product &Plasmid Purification, Transformation, Transfection.

Computer Skills:

- windows and PowerPoint
- Excel and Word
- Paint
- Chromas Soft ware
- Generuner Software
- Primer Designing & Blast
- Lab image soft ware

Membership:

- American Society Hematology (ASH)
- International Society of Blood Transfusion (ISBT)
- European Hematology Association (EHA)
- International Society of Laboratory Hematology (ISLH)

Languages:

Persian: Native

English: Fluent

Arabic: Little