

# **CURRICULUM VITAE**

## **Somaieh Kazemnejad**

Associate Professor of Clinical Biochemistry

Avicenna Research Institute

Phone Number: +98-21-22432020

Email: [s.kazemnejad@ari.ir](mailto:s.kazemnejad@ari.ir)

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### **Education:**

**University of Tarbiat Moddares, Tehran, Iran**

Ph.D. of Clinical Biochemistry, 2003-2008

**University of Tarbiat Moddares, Tehran, Iran**

M.Sc.in Clinical Biochemistry, 2001-2003

**University of Shahid Beheshti, Tehran, Iran**

BSc in Nutrition, 1997-2001

### **Current Scopus citation:**

*h*-index: 15

Total citations: 591

### **Certifications:**

- Associate Professor in Clinical Biochemistry, Health Department, Tehran, Iran (2015).
- Elite Researcher of Avicenna Research Institute, Tehran, Iran ( 2014).
- Elite Researcher of Academic Center for Education, Culture and Research, Tehran, Iran (2014).
- Elite Researcher of Guilan University of Medical Science, Guilan, Iran (2010).

### **Relevant Course Works:**

- Training course of Clinical Embryology, Avicenna Infertility Clinic, Tehran, Iran (2010-2012)

### **Honors and Awards:**

- Selected as Elite talent by Iranian National Foundation of Choice Parts
- Selected as elite young investigator in Basic Science section in 20<sup>th</sup> Razi Festival of Iran in 2015
- The second place of fundamental Researches in the young section by the “22<sup>nd</sup> Khwarizmi Award” of Iran.
- Young Investigation Award of Asia Pacific Digestive Week Conference, Delhi, India, 2008

### **Published Papers in International Journals:**

- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirzadeh N and Maryam Jazayeri. Biochemical and molecular characterization of hepatocyte-like cells derived from human bone marrow mesenchymal stem cells on a novel three-dimensional biocompatible nanofibrous scaffold. Journal of Gastroenterology and hepatology. 2009, 24(2):278-87.
- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirzadeh N and Shahnaz Esmali. Functional hepatocyte-like cells derived from human bone marrow mesenchymal stem cells on a novel 3-dimensional biocompatible nanofibrous scaffold. International Journal of Artificial Organs. 2008 Jun;31(6):500-7.
- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirzadeh N, kaviani S and Maryam Jazayeri. Development of a novel three-dimensional biocompatible nanofibrous scaffold for the expansion and hepatogenic differentiation of

human bone marrow mesenchymal stem cells. Iranian Journal of Biotechnology. 2007; 5(4): 201-11.

- **Kazemnejad S**, Allameh A, Gharehbaghian A, Soleimani M, Amirizadeh Nand Maryam Jazayeri. Efficient replacing of fetal bovine serum with human platelet releasate during propagation and differentiation of human bone marrow derived mesenchymal stem cells to functional hepatocytes-like cells. Vox Sanguinis. 2008 Aug;95(2):149-58.
- **Kazemnejad S**, Rasmi Y, Sharifi R, Allameh A. Class Pi of glutathione S-transferases. Iranian Journal of Biotechnology. 2006; 4(1):1-16. Review Article.
- Allameh A, Esmaeli S, **Kazemnejad S**, Soleimani M. Differential expression of glutathione S-transferases P1-1 and A1-1 at protein and mRNA levels in hepatocytes derived from human bone marrow mesenchymal stem cells. Toxicology in vitro, 2009, 23(4):674-9.
- Fatemi F, **Kazemnejad S**, Dadkhah A, Rahmati M, Allameh A. Differential effects of acetaminophen and aflatoxin B1 on expression of liver class-P glutathione s-transferase in growing rats. Iranian Journal of Science and Technology. 2007; 31 (A1): 44-52.
- Dadkhah A, Fatemi F, **Kazemnejad S**, Rasmi Y, Ashrafi-Helan J, Allameh A. Differential effects of acetaminophen on enzymatic and non-enzymatic antioxidant factors and plasma total antioxidant capacity in developing and adult rats. Molecular and Cellular Biochemistry. 2006; 281: 145–152.
- Fatemi F, Allameh A, Dadkhah A, Forouzandeh M, **Kazemnejad S**, Sharifi R. Changes in hepatic cytosolic glutathione S-transferase activity and expression of its class-P during prenatal and postnatal period in rats treated with aflatoxin B1. Archive of Toxicology. 2006; 80: 572-579.

- Jazayeri M, Allameh A, Soleimani M, Jazayeri SH, Kaviani S, **Kazemnejad S**. Capillary network formation by endothelial cells differentiated from bonemarrow mesenchymal stem cells. Iranian Journal of Biotechnology. 2008, 6(1); 1-8.
- Jazayeri M, Allameh A, Soleimani M, Jazayeri SH, Piryaei A, **Kazemnejad S**. Molecular and Ultrastructural Characterization of Endothelial Cells Differentiated from Human Bone Marrow Mesenchymal Stem Cells. Cell Biology International, 2008: 32(10):1183-92.
- **Kazemnejad S**. Hepatic tissue engineering using scaffold; state of the art. Avicenna Journal of Medical Biotechnology .2010: 3:3-10.(Review article).
- **Kazemnejad Somaieh**, Akhondi Mohammad-Mehdi, Soleimani Masoud, Zarnani Amir Hassan, Khanmohammadi Manijeh, Darzi Saeedeh. Characterization and chondrogenic differentiation of menstrual blood- derived stem cells on a nanofibrous scaffold. The Int J of Artificial Organs. 2012, 35(1):55-66.
- Ghamartaj Hossein, Manijeh Khanmohamadi, Neda Jarooghi, **Somaieh Kazemnejad**. Evidence for an association of Wnt-independent  $\beta$ -catenin intracellular localization with ovarian apoptotic events in normal and PCO-induced rat ovary. J of PBS. 2011, 1(2): 1-10
- Saeedeh Darzi, Amir Hassan Zarnani, Mahmood Jeddi-Tehrani, K Entezami Ebrahim Mirzadegan, Mohammad Mehdi Akhondi, Saeed Talebi, Manijeh Khanmohammadi, **Somaieh Kazemnejad** (corresponding author). Osteogenic differentiation of menstrual blood- versus bone marrow-derived stem cells in the presence of human platelet releasate. Tissue Engineering. 18(15-16):1720-8.
- Manijeh Khanmohammadi, Sayeh Khanjani, Mahsa Sani Bakhtiari, Amir Hassan Zarnani, Haleh Edalatkhah, Mohammad Mehdi Akhondi, Ebrahim Mirzadegan, Kouros Kamali, Kamran Alimoghadam, **Somaieh Kazemnejad** (corresponding author). Proliferation and chondrogenic differentiation potential of menstrual blood- versus bone

marrow-derived stem cells in two-dimensional culture. Int J of Hematology. 2012, 95(5): 484-493.

- Allameh Abdolamir, **Kazemnejad Somaieh**. Safety evaluation of stem cells used for clinical cell therapy in chronic liver diseases; with emphasize on biochemical markers. Clin Biochem 2012;45:385-396.
- Shohreh Nikoo, Massoumeh Ebtekar, Mahmood Jeddi-Tehrani, Adel Shervin, Mahmood Bozorgmehr, **Somaieh Kazemnejad** and Amir Hassan Zarnani. Effect of menstrual blood-derived stromal stem cells on proliferative capacity of peripheral blood mononuclear cells in allogeneic mixed lymphocyte reaction. 2012;38(5):804-9.
- **Kazemnejad S**, Khanmohammadi M, Zarnani AH, Nikokar I, Saghari S. Role of wnt-signaling on proliferation of menstrual blood derived stem cells. 2013; 12: 1-8.
- Sayeh Khanjani, Manijeh Khanmohammadi, Saeed Talebi, Haleh Edalatkhah, Amir Hassan Zarnani, Saman Eghtesad, **Somaieh Kazemnejad (corresponding author)**. Efficient differentiation of menstrual blood derived stem cells into functional hepatocyte-like cells using various conversion protocols. Journal of Tissue engineering and regenerative medicine. 2015, .
- Delbandi AA, Mahmoudi M, Shervin A, Akbari E, Jeddi-Tehrani M, Sankian M, **Kazemnejad S**, Zarnani AH. Eutopic and ectopic stromal cells from patients with endometriosis exhibit differential invasive, adhesive, and proliferative behavior. Fertility and Sterility. Fertil Steril. 2013 Sep;100(3):761-9.
- Nikoo S, Ebtekar M, Jeddi-Tehrani M, Shervin A, Bozorgmehr M, Vafaei S, **Kazemnejad S**, Zarnani AH. Menstrual blood-derived stromal stem cells from women with and without endometriosis reveal different phenotypic and functional characteristics. Mol Hum Reprod. 2014 Jun 16.

- **Kazemnejad S (corresponding author)**, Najafi R, Zarnani AH, Eghtesad S. Comparative Effect of Human Platelet Derivatives on Proliferation and Osteogenic Differentiation of Menstrual Blood-Derived Stem Cells. *Mol Biotechnol.* 2014 Mar;56(3):223-31.
- Tabatabaei M, Mosaffa N, Nikoo S, Bozorgmehr M, Ghods R, **Kazemnejad S**, Rezania S, Keshavarzi B, Arefi S, Ramezani-Tehrani F, Mirzadegan E, Zarnani AH. Isolation and partial characterization of human amniotic epithelial cells: the effect of trypsin. *Avicenna J Med Biotechnol.* 2014 Jan;6(1):10-20.
- Khanjani S, Khanmohammadi M, Zarnani AH, Akhondi MM, Ahani A, Ghaempanah Z, Naderi MM, Eghtesad S, **Kazemnejad S (corresponding author)**. Comparative evaluation of differentiation potential of menstrual blood- versus bone marrow-derived stem cells into hepatocyte-like cells. *PLoS One.* 2014 Feb 5;9(2):e86075.
- Azedi F, **Kazemnejad S (corresponding author)**, Zarnani AH, Behzadi G, Vasei M, Khanmohammadi M, Khanjani S, Edalatkhah H, Lakpour N. Differentiation potential of menstrual blood- versus bone marrow-stem cells into glial-like cells. *Cell Biol Int.* 2014 May;38(5):615-24.
- Rahimi M, Mohseni-Kouchesfehani H, Zarnani AH, Mobini S, Nikoo S, **Kazemnejad S (corresponding author)**. Evaluation of menstrual blood stem cells seeded in biocompatible Bombyx mori silk fibroin scaffold for cardiac tissue engineering. *J Biomater Appl.* 2014 Jan 19;29(2):199-208.
- Khanmohammadi M, Khanjani S, Edalatkhah H, Zarnani AH, Heidari-Vala H, Soleimani M, Alimoghaddam K, **Kazemnejad S (corresponding author)**. Modified protocol for improvement of differentiation potential of menstrual blood-derived stem cells into adipogenic lineage. *Cell Prolif.* 2014 Dec;47(6):615-623.
- Rahimi M, Zarnani AH, Mohseni-Kouchesfehani H, Soltanghoraei H, Akhondi MM, **Kazemnejad S (corresponding author)**. Comparative evaluation of cardiac markers in

differentiated cells from menstrual blood and bone marrow-derived stem cells in vitro. *Mol Biotechnol.* 2014;56(12):1151-62.

- Aida Esmaeli, Sayeh Khanjani, Mohammad-Reza Vaziri, Shaghayegh Arasteh, and **Somaieh Kazemnejad (corresponding author)**. Gene expression pattern of cytochrome P450 and glutathione s-transferase enzymes in differentiated hepatocytes-like cells from menstrual blood stem cells. *In Vitro Cellular & Developmental Biology.* 2015, 51 (5): 530-8
- **Kazemnejad S**, Akhondi MM, Soleimani M, Zarnani AH, **Khanmohammadi M**, Darzi S, Alimoghadam K. Characterization and chondrogenic differentiation of menstrual blood-derived stem cells on a nanofibrous scaffold. *Int J Artif Organs.* 2012 Jan;35(1):55-66.
- Shahnaz Esmaeli, Abdolamir Allameh, Mohammad Sajad Emami Aleagha, **Somaieh Kazemnejad**, Masoud Soleimani. Expression of cytochrome P450 and glutathione S-transferase in human bone marrow mesenchymal stem cells. 2012; 10(4): 270-274.
- Rashidi N, Mirahmadian M, Jeddi-Tehrani M, Rezaia S, Ghasemi J, **Kazemnejad S**, Mirzadegan E, Vafaei S, Kashanian M, Rasoulzadeh Z, Zarnani AH. Lipopolysaccharide- and Lipoteichoic Acid-mediated Pro-inflammatory Cytokine Production and Modulation of TLR2, TLR4 and MyD88 Expression in Human Endometrial Cells. 2015; 16(2): 72-81.
- Mobini S, Khanmohammadi M, Heidari-Vala H, Samadikuchaksaraei A, Moshiri A, **Kazemnejad S (corresponding author)**. *Tissue Engineering and Regenerative Medicine in Iran: Current State of Research and Future Outlook.* 2015; 57(7): 589-605
- Arasteh S, **Kazemnejad S (corresponding author)**, Khanjani S, Heidari-Vala H, Akhondi MM, Mobini S. Fabrication and characterization of nano-fibrous bilayer composite for skin regeneration application. *Methods.* 2016 Apr 15;99:3-12.

- **Kazemnejad S (corresponding author)**, Khanmohammadi M, Mobini S, Taghizadeh-Jahed M, Khanjani S, Arasteh S, Golshahi H, Torkaman G, Ravanbod R, Heidari-Vala H, Moshiri A, Tahmasebi MN, Akhondi MM. Comparative repair capacity of knee osteochondral defects using regenerated silk fiber scaffolds and fibrin glue with/without autologous chondrocytes during 36 weeks in rabbit model. *Cell Tissue Res.* 2016 Jun; 364(3):559-72.
  
- Farzaneh Aghajani, Tabassom Hooshmand, Manijeh Khanmohammad, Sayeh Khanjani Haleh Edalatkhah, Amir-Hassan Zarnani, **Somaieh Kazemnejad (corresponding author)**. Comparative Immunophenotypic Characteristics, Proliferative Features, and Osteogenic Differentiation of Stem Cells Isolated from Human Permanent and Deciduous Teeth with Bone Marrow. *Molecular biotechnology*, 2016.
  
- Sahba Mobini, Masoud Taghizadeh-Jahed, Manijeh Khanmohammadi, Ali Moshiri, Mohammad-Mehdi Naderi, Hamed Heidari-Vala, Javad Ashrafi Helan, Sayeh Khanjani, Armin Springer, Mohammad-Mehdi Akhondi, and **Somaieh Kazemnejad (corresponding author)**. Comparative evaluation of in vivo biocompatibility and biodegradability of regenerated silk scaffolds reinforced with/without natural silk fibers. *Journal of Biomaterials Applications*, 2016, 30(6):793-809.
  
- Rasoulzadeh Z, Ghods R, Kazemi T, Mirzadegan E, Ghaffari-Tabrizi-Wizsy N, Rezanian S, **Kazemnejad S**, Arefi S, Ghasemi J, Vafaei S, Mahmoudi AR, Zarnani AH. Placental Kisspeptins Differentially Modulate Vital Parameters of Estrogen Receptor-Positive and - Negative Breast Cancer Cells. *PLoS One.* 2016 Apr 21;11(4):e0153684.
  
- **Somaieh Kazemnejad (corresponding author)**, Manijeh Khanmohammadi, Nafiseh Baheiraei, Shaghayegh Arasteh. Current state of cartilage tissue engineering using nanofibrous scaffolds and stem cells. *Avicenna Journal of Medical Biotechnology (AJMB)*, 2016.



- Fatemeh Arjmand Timori, Manijrh Khanmohammadi, Shaghayegh Arasteh, Afsaneh Mohammadzadeh, **Somaieh Kazemnejad** (corresponding author),\_ Mohammad Mehdi Akhondi, Extended Culture of Encapsulated Human Blastocysts in Alginate Hydrogel Containing Decidualized Endometrial Stromal Cells in the Presence of Melatonin. MOLECULAR BIOTECHNOLOGY, 2016,
  
- **Somaieh Kazemnejad**, (corresponding author), Future Directions for Translation of Tissue Engineering Products Into Clinic Avicenna Journal of Medical Biotechnology (AJMB), 2016.
  
- Ghamartaj Hossin, Manijrh Khanmohammadi, Parisa Sahranavard, **Somaieh Kazemnejad**, Mohammad Mehdi Akhondi. Exogenous Secreted Frizzled-Related Protein-4 Modulates Steroidogenesis of Rat Granulosa Cells through Wnt/ $\beta$ -catenin and PI3K/AKT Signaling Pathways, Avicenna Journal of Medical Biotechnology, 2016.
  
- Farnaz Sani, Giti Borzooeian, **Somaieh Kazemnejad**, Sepideh Ebrahimi, Masoomeh Mohamadpour, Sayeh Khanjani, Mona Latifi, Seyed Mojtaba Hosseini, Mahin Salmannejad, Fatemeh Aleahmad, Hossein Mehraban Jahromi, Mahsa Sani. Differentiation of Menstrual Blood Derived Stem Cell (MensSCs) to Hepatocyte-Liked Cell on Three Dimensional Nanofiberscaffold: Poly caprolacton (PCL). J. Biomedical Science and Engineering, 2016, 9, 216-225
  
- Narges Johari, Hamid Reza Madaah Hosseini, Nafise Taromi, Shaghayegh Arasteh, **Somaieh Kazemnejad**, Ali Samadikuchaksaraei. Evaluation of Bioactivity and Biocompatibility of Silk Fibroin/ TiO<sub>2</sub> Nanocomposite J. Med. Biol. Eng. In press
  
- Akhavan-Tavakoli M, Fard M, Khanjani S, Zare S, Edalatkah H, Mehrabani D, Zarnani AH, Shirazi R, **Kazemnejad S** (corresponding author). In vitro differentiation of menstrual blood stem cells into keratinocytes: A potential approach for management of wound healing. Biologicals. 2017 Jul;48:66-73.

- Fathi-Kazerooni M, Tavoosidana G, Taghizadeh-Jahed M, Khanjani S, Golshahi H, Gargett CE, Edalatkhah H, **Kazemnejad S (corresponding author)**. Comparative restoration of acute liver failure by menstrual blood stem cells compared with bone marrow stem cells in mice model. *Cytotherapy*. 2017 Dec;19(12):1474-1490.
  
- Rajabi Z, Yazdekhesti H, Noori Mugahi SMH, Abbasi M, **Kazemnejad S**, Shirazi A, Majidi M, Zarnani AH. Mouse preantral follicle growth in 3D co-culture system using human menstrual blood mesenchymal stem cell. *Reprod Biol*. 2018 Mar;18(1):122-131. doi: 10.1016/j.repbio.2018.02.001. Epub 2018 Feb 15.
  
- Fard M, Akhavan-Tavakoli M, Khanjani S, Zare S, Edalatkhah H, Arasteh S, Mehrabani D, Zarnani AH, **Kazemnejad S (corresponding author)**, Shirazi R. Bilayer Amniotic Membrane/Nano-fibrous Fibroin Scaffold Promotes Differentiation Capability of Menstrual Blood Stem Cells into Keratinocyte-Like Cells. *Mol Biotechnol*. 2018 Feb;60(2):100-110.
  
- Tabatabaei M, Mosaffa N, Ghods R, Nikoo S, **Kazemnejad S**, Khanmohammadi M, Mirzadeghan E, Mahmoudi AR, Bolouri MR, Falak R, Keshavarzi B, Ramezani M, Zarnani AH. Vaccination with human amniotic epithelial cells confer effective protection in a murine model of Colon adenocarcinoma. *Int J Cancer*. 2018 Apr 1;142(7):1453-1466.
  
- Rahini M, Zarnani AH, Mobini S, Khorasani S, Darzi M, **Kazemnejad S (corresponding author)**. Comparative effectiveness of three-dimensional scaffold, differentiation media and co-culture with native cardiomyocytes to trigger in vitro cardiogenic differentiation of menstrual blood and bone marrow stem cells. *Biologicals*. 2018 Jun 5. pii: S1045-1056(18)30136-2.

### **Teaching Experience:**

- General Biochemistry, Medical Biochemistry, Endocrinology, Practical Biochemistry for B.Sc students (2010-2012)

- Advanced Biology of Stem Cells for Ph.D students (since 2012)
- Tissue engineering for Ph.D students (since 2017)

### **Book edition:**

**Somaieh Kazemnejad**, Manijeh Khanmohammadi, Hamed Heidari-Vala, Mohammad Mehdi Akhondi. Advanced biology of adult stem cells. In Persian, 2013, Avicenna Research Institute. Tehran-Iran.

**Somaieh Kazemnejad**, Amir Hasan Zarnani, Manijeh Khanmohammadi, Sahba Mobini. Chondrogenic differentiation of menstrual blood- derived stem cells on nanofibrous scaffolds. Methods in Molecular Biology. Humana press, 2013, 1058:149-169.

**Somaieh Kazemnejad** , Manijeh Khanmohammadi , Amir-Hassan Zarnani, and Mohammad Reza Bolouri.Characteristics of Mesenchymal Stem Cells Derived from Amniotic Membrane: A Potential Candidate for Stem Cell-Based Therapy. Perinatal Tissue-Derived Stem Cells. Humana press, 2016, 137-170.

**Somaieh Kazemnejad** , Manijeh Khanmohammadi , Abolfazl Shirazi , Shaghayegh Arasteh , Sayeh Khanjani , and Mehdi Aleahmad. Amniotic Fluid: A Source of Stem Cells for Therapeutic Use and Modeling of Human Genetic Diseases. Perinatal Tissue-Derived Stem Cells. Humana press,2016,171-188.

### **Research Experiences:**

- Stem cells differentiation
- Tissue engineering
- Developmental biology
- Embryology

### **Educational Workshops taught and conducted:**

- Culture of stem cells on 3D scaffolds, 24-25 May, 2014, Tehran, Iran,
- Fabrication and characterization of nanofibrous scaffolds, 15-16 Feb, 2015, Tehran, Iran,
- Isolation, characterization and expansion of mesenchymal stem cells, 12-13, June, 2015, Tehran, Iran

### **Presented papers in international conferences:**

**Somaieh Kazemnejad**, Mohammadmehdi Akhondi, Amir Hassan Zarnani, Masoud Soleimani, et al. Effect of lithium chloride on b-catenin expression, proliferation and osteogenic differentiation of human menstrual blood derived stem cells. Tissue Engineering & Regenerative medicine International Society, 2010 Asia Pacific Meeting, Australia (oral & poster presentation).

**Somaieh Kazemnejad**, Mohammadmehdi Akhondi, Amirhasan Zarnani, Masoud Soleimani, et al. chondrogenic differentiation of menstrual blood derived stem cells on a nanofibrous scaffold. Tissue Engineering & Regenerative medicine International Society, 2010 Asia Pacific Meeting, Australia (oral presentation).

**Somaieh Kazemnejad**, Mohammadmehdi Akhondi, Amirhasan Zarnani, Masoud Soleimani, et al. Remarkable osteogenic differentiation of human menstrual blood derived stem cells in presence of human platelet releasate. Tissue Engineering & Regenerative medicine International Society, 2010 Asia Pacific Meeting, Australia (oral & poster presentation).

**Kazemnejad S**, et al. Differentiation of menstrual blood derived stem cells into chondrocytes on a nanofibrous scaffold. 11th Royan International Twin Congress, 2010 (poster presentation).

**Kazemnejad S**, Allameh A, Soleimani M, GharehbaghianA, Mohammadi Y, - Amirzadeh N, kaviani S and Maryam Jazayeri. Differentiation of human bone marrow derived mesenchymal stem cells to hepatocytes on a novel biodegradable nanofibrous scaffold. ISEH 36th Annual Scientific Meeting published in Experimental Hematology 35 (2007).

**Kazemnejad S**, Allameh A, Soleimani M, GharehbaghianA, Mohammadi Y, Amirzadeh N, kaviani S. Hepatic differentiation of human bone marrow mesenchymal stem cells on a biodegradable nanofibrous scaffold. The 8<sup>th</sup> Royan International Twin Congress, 2007. (Oral presentation)

**Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirzadeh N. Differentiation of functionally active hepatocyte-like cells from human adult bone marrow mesenchymal stem cells on a three dimensional (3D) nanofibrous scaffold. Asia Pacific Digestive Week Conference published in Journal of Gastroenterology and Hepatology. 2008. (Oral presentation)

**Kazemnejad S**, Allameh A, Mesbah SA. Expression of mRNA hepatic glutathione s-transferase-P in paracetamol-treated developing rats. 19<sup>th</sup> European Workshop of Drug Metabolism. 2004.(poster presentation)

Fatemi F, **Kazemnejad S**, Dadkhah A, Rahmati M, Allameh A. Differential effects of acetaminophen and aflatoxin B1 on expression of liver class-P glutathione s-transferase in growing rats. The 2th International Congress of Biochemistry and Molecular Biology/Archive of Iranian Medicine (2007).(poster presentation)

Esmaeli S, **Kazemnejad S**, Soleimani M, Allameh A. Expression of glutathione s-transferase in hepatocytes derived from human bone marrow mesenchymal stem cells. The 2th International Congress of Biochemistry and Molecular Biology. /Archive of Iranian Medicine (2007).(poster presentation)

Jazayeri M, Allameh A, Soleimani M, **Kazemnejad S**. Ultrastructural study of the differentiated endothelial cells from human bone marrow mesenchymal stem cells. 5th Annual ISSCR Annual Meeting. 2007.(poster presentation)

Darzi S, **Kazemnejad S**, Jeddi-Tehrani M, Akhondi M, Zarnani AM. Osteogenic differentiation of menstrual blood derived stem cells. The 8th congress of Obstetrics & Gynecology. 2009. (oral presentation)

**Kazemnejad S**. Human Platelet Releasate: An Efficient Substitute For Fetal Bovine Serum During Hepatic Differentiation Of Human Bone Marrow- Derived Mesenchymal Stem Cells. TERMIS 2nd World Congress. 2009. (poster presentation)

**Kazemnejad S**. Hepatic differentiation of human bone marrow derived mesenchymal stem cells in presence of human platelet releasate instead of fetal bovine serum. ISSCR 7th Annual Meeting. 2009. (poster presentation)

Allameh A, **Kazemnejad S**. Hepatogenic differentiation of mesenchymal stem cells in presence of platelet releasate instead of fetal bovine serum. The 10<sup>th</sup> Royan International Twin Congress. 2009.(poster presentation).

Hossein Ghamartaj, Khanmohammadi Manijeh, Sahranavard Parisa, **Kazemnejad Somaieh**, Akhoondi Mohammadmehdi. Crosstalk between Wnt/ $\beta$ catenin and Akt/PI3kinase pathways in relation with rat granulosa cells terminal differentiation and apoptosis. 4<sup>th</sup> Yazd International Congress and Student Award in Reproduction Medicine held on April 2011 in Yazd-Tehran ( poster presentation).

Manijeh Khanmohammadi, **Somaieh Kazemnejad**, Saeedeh Darzi, Sayeh Khanjani, Amir Hasan Zarnani, Mohammadmehdi Akhondi. Expression profiling and differentiation potential of menstrual blood derived stem cells compared with stem cells derived from human bone marrow. 27th Annual Meeting of ESHRE on July 2011 in Stockholm –Sweden( poster presentation).

Khanjani Sayeh, Edalatkhah Haleh, Talebi Saeed, ZarnaniAmirHasan, Khanmohammadi Manijeh, Mahsa Sani Bakhtiari, **Kazemnejad Somaieh**. Evaluation of hepatogenic differentiation potential of menstrual blood derived stem cells. 12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology on September 2011 Mashhad, Iran (poster presentation). Published in Clinical Biochemistry.

Abdolamir Allameh, Hamidreza Ahmad-Ashtiani, **Somaieh Kazemnejad**, Masoud Soleimani, Ahmad Gharebaghian, Hossein Rastegar. Role of glutathione system in biochemical and metabolic functions of hepatocyte-like cells differentiated from human bone marrow mesenchymal stem cells. 12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology on September 2011 Mashhad, Iran(Oral presentation). Published in Clinical Biochemistry.

Shahnaz Esmaeli, Abdolamir Allameh, **Somaieh Kazemnejad**, Masoud Soleimani. Expression of the major classes of glutathione s-transferases and glutathione content in hepatocyte-like cells differentiated from human bone marrow mesenchymal stem cells.12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry & Molecular Biology on September 2011 Mashhad, Iran (poster presentation). Published in Clinical Biochemistry.

Mahsa Sani bakhtiary, **Somaieh Kazemnejad**, Sayeh khanjani, Masoud soleimani, Mohammad Mehdi Akhondi. Hepatogenic differentiation of menstrual blood derived stem cells on a three dimensional nanofibrous scaffold. 9th International Congress on Obstetrics and Gynecology on November 2011 Tehran- Iran (Oral presentation).

Manijeh Khanmohammadi, Haleh Edalatkhah, Saeed Talebi, Mohammad Mehdi Akhondi, **Somaieh Kazemnejad**. Chondrogenic and adipogenic differentiation potential of menstrual blood- *versus* bone marrow-derived stem cells. International Society for Stem Cell Research 2012 Annual Meeting on June, Yokohama, Japan (poster presentation).

Khanjani S, Edalatkhah H, Talebi S, Hayati Roudbari N, ZarnaniAH, Khanmohammadi M, **KazemnejadS**. Evaluation of hepatogenic differentiation potential of menstrual blood derived stem cells. International Society for Stem Cell Research 2012 Annual Meeting on June, Yokohama, Japan (poster presentation).

**Somaieh Kazemnejad**, Mahsa Sani bakhtiary, Sayeh khanjani, Masoud soleimani, Mohammad Mehdi Akhondi. Hepatogenic differentiation of menstrual blood derived stem cells on a three dimensional nanofibrous scaffold. International Society for Stem Cell Research 2012 Annual Meeting on June, Yokohama, Japan (poster presentation).

**Kazemnejad Somaieh**. Efficient effect of human platelet releasate on hepatogenic differentiation of human bone marrow derived mesenchymal stem cells. The Asian Pacific Digestive Week on October 2011 Singapore (Poster presentation).

Manijeh Khanmohammadi, Sayeh khanjani, Haleh Edalatkhah, Saeed Talebi, Mohammad Mehdi Akhondi, **Somaieh Kazemnejad**. Condrogenic differentiation of menstrual blood derived stem cells. 9th International Congress on Obstetrics and Gynecology on November 2011 Tehran- Iran ( Oral presentation).

Sayeh Khanjani, Manijeh Khanmohammadi, Haleh Edalatkhah, Saeed Talebi, Mohammad Mehdi Akhondi, **Somaieh Kazemnejad**. Differentiation potential of menstrual blood derived stem cells into hepatocyte- like cells. 9th International Congress on Obstetrics and Gynecology on November 2011 Tehran- Iran (poster presentation).

**Somaieh Kazemnejad**. Safety evaluation of stem cell for clinical cell therapy of liver diseases: with emphasis on biochemical markers. 3<sup>rd</sup> Annual Iranian International Congress of Forensic Medicine on May 2012, Tehran, Iran (Oral Presentation).

**Somaieh Kazemnejad**, Roghaieh Najafi, Mojtaba Hosseinpour, Iraj Nikokar. Proliferation and osteogenic differentiation of menstrual blood derived stem cells in presence of different products of platelet concentrates. 3<sup>rd</sup> TERMIS world congress, 2013, Austria (poster presentation).



Azedi Tehrani F, **Kazemnejad S**, Zarnani AH, Behzadi J, Akhondi MM. Derivation of neurospheres from menstrual blood derived stem cells: in comparison with human bone marrow mesenchymal stem cells. Basic and clinical neuroscience congress 2012, Iran- Tehran (Poster presentation).

**Somaieh Kazemnejad**. Hepatic Tissue Engineering: state of the art. The First Iranian congress on Progress in Tissue Engineering and Regenerative Medicine 2013, Iran- Tehran (Oral Presentation)

**Somaieh Kazemnejad**, Sahba Mobini, Manijeh Khanmohammadi, Mohammad Mehdi Akhondi, Sayeh Khanjani, Masoud Taghizadeh, Hamed Heidari, Amir Hassan Zarnani. Repair of cartilage defects in using chondrocyte/silk fibroin scaffolds in a rabbit model. Tissue Engineering & Regenerative medicine International Society, 2010 European Meeting, Turkey, Istanbul (oral/poster Presentation).

Azedi Tehrani F, **Kazemnejad S**, Zarnani AH, Behzadi J, Akhondi MM . Differentiation capacity of menstrual blood-versus bone marrow-derived stem cells into neuronal and glial lineage. Abstracts of the 9<sup>th</sup> Royan International Congress on stem cell Biology & Technology on summer 2013, Iran- Tehran (poster Presentation).

Maryam Rahimi, **Somaieh Kazemnejad**, Amir Hassan Zarnani, H. Mohseni kouchesfehni. Evaluation of cardiac differentiation potential of menstrual blood-versus bone marrow-derived stem. Abstracts of the 9<sup>th</sup> Royan International Congress on stem cell Biology & Technology on summer 2013, Iran- Tehran (poster Presentation).

**S Kazemnejad**, S Mobini, MM Akhodni, M Taghizadeh, M Khanmohammadi, H Heidari, S Khanjani, MM Naderi, A Muhammadnejad. Efficient Repair of Cartilage Defect Using Chondrocyte/silk Based Scaffold Constructs. Termis-eu 2013 on June 2013 Istanbul, Turkey (Poster presentation).

A Allameh, H Ahmadi, **S Kazemnejad**, M Soleimani, A Gharebaghian, H Rastegar, Sh Ismaeili, M Hedayati. Role of glutathione system in biochemical and metabolic functions of hepatocytes-like cells differentiated from human bone marrow mesenchymal stem cells.12th Iranian Congress of Biochemistry & 4th International Congress of Biochemistry and Molecular Biology, Mashhad, Iran, 2011(Oral presentation).

**Somaieh Kazemnejad**. Characteristics and Clinical Application of Menstrual Blood Stem Cells as an Accessible and Refreshing Source of Adult Stem Cells.International Congress on Stem Cells and Regenerative Medicine on May 2015 Iran,Mashhad (oral presentation).

**Somaieh Kazemnejad**. Menstrual Blood Stem Cells as a Renewable Source of Adult Stem Cells: Features and Advantages .International Congress on Reproduction on May 2015 Iran University of Medical Sciences,Tehran,Iran on May 2015 (oral presentation).

Azedi Tehrani F, **Kazemnejad S**, Zarnani AH, Behzadi J, Akhondi MM. Evaluation of neural ion channels genes expression in menstrual blood stem cells versus bone marrow stem cells during neuronal differentiation .Basic and Clinical NEUR SCIENCE 3rd Congress on October 2014 Razi Hall,Tehran (oral presentation).

Shaghayegh Arasteh, **Somaieh Kazemnejad**, Sahba Mobini. Fabrication of De-Epithelized Amniotic Membrane/Silk Nanofibrous Scaffolds for Skin Tissue Engineering. International Congress on Stem Cells and Regenerative Medicine on May 2015 Iran University of Medical Sciences,Tehran,Iran (oral presentation).

Sahba Mobini,**Somaieh Kazemnejad**. In Vivo Degradation of Natural/Regenerated Silk Composite Scaffolds.International Bone- Tissus- Engineering Congress on December 2013 school of chemical and Biomedical Engineering(Poster presentation).

S Darzi, **S Kazemnejad**, A Zarnani, M Jeddi-Tehrani, K Entezami, M Akhondi, M Torabi Rahvar. Differentiation capacity of menstrual blood stromal stem cells towards Osteocytes.14th International Congress of Immunology on August 2010 Kobe, Japan (Poster presentation).

S Azedi Tehrani F, **Kazemnejad S.** Behzadi G ,Zarnani AH, Akhondi MM. Evaluation of Developed Neurospheres from Human Menstrual Blood-versus Bone Marrow-Derived Stem Cells.3rd International Conference on Stem Cells and Cancer (ICSCC-2012): Proliferation, Differentiation, and Apoptosis on October 2012 New Dehli, India (Poster presentation).

Arasteh, S., **Kazemnejad, S.**, Akhondi, M.M., Heidari-Vala, H., Mobini, S. “Fabrication of de-epithelized amniotic membrane/silk nanofibrous scaffolds for skin tissue engineering” “International Congress on Stem Cells and Regenerative Medicine” held in Mashhad, Iran, May 20-22,2015.(oral presentation).

Arasteh, S., **Kazemnejad, S.**, Taghizadeh, M., Khanjani, S., Heidari Vala, H., Edalatkhah, H., Akhondi, M.H., Mobini, S., Firooz, A. “In vivo improved wound healing in mouse model using a bilayer skin substitute based on silk fibroin and amniotic membrane” “The 2nd National congress of wound and tissue repair” held in Tehran, Iran, October 6-8, 2015. (Oral presentation).

**Kazemnejad S.**, Comparative repair capacity of knee osteochondral defects using regenerated silk fiber scaffolds and fibrin glue with/without autologous chondrocytes during 36 weeks in rabbit model. International Congress on Stem Cells and Regenerative Medicine on May 2015 Iran University of Medical Sciences,Tehran,Iran (Oral presentation).

S.Naeimipour, **S.Kazemnejad**, Tissue Engineering and Engineers. 2nd Iranian Congress on Progress in Tissue Engineering and Regenerative Medicine, Iran 2015.

Somayeh Khorasani, **Somaieh Kazemnejad.** Chemical and mechanical assessment of scaffolds produced by fibroin extracted from different silkworm strains. Stem cells and Regenerative Medicine Int.Congress, Tehran,Iran 2016 (Poster presentation).

Mina Fathi Kazeroni, **Somaieh Kazemnejad** Liver Restoration in Mouse Model of Acute Liver Failure Post Transplantation of Menstrual Blood Stem Cells. The First National Festival &

International Congress on Stem Cell and Regenerative Medicine, Tehran, Iran 2016 (poster presentation).

Manijeh khammohamadi, Zahra safarian, Sayeh Khanjani, Samaneh Montazeri, **Somaieh Kazemnejad**. Reostration of Osteochondral defects using menstrula blood stem cells encapsulated in fibrin glue in rabbit model , 3rd Iranian Congress on Progress Tissue Engineering and Regenerative Medicine, iran 2016 (Oral presentation)

Mina Fathi Kazeroni, **Somaieh Kazemnejad** Tavosi gholamreza , Sayeh Khanjani, Masood Taghizadeh jahed, Haleh Edalatkah. Comparative Efficiency of Menstrual Blood- and Bone Marrow-Derived Mesenchymal Stem Cells Transplantation in treatment of CCl4-Induced Mouse Liver Fibrosis . 3rd Iranian Congress on Progress Tissue Engineering and Regenerative Medicine. Iran 2016 (Oral presentation)

Azedi Tehrani F, Mohammad taghi Joghataei, Kazemh Mosavizadeh, Amir hasan Zarnani, **Somaieh Kazemnejad**, Masood Mehrpor. Derivation of functional neural-like cells from human menstrual blood Stem cells. 3rd Iranian Congress on Progress Tissue Engineering and Regenerative Medicine, Iran 2016 (Oral presentation)

**Somaieh Kazemnejad**. Fertility preservation in endometriosis. 3rd National and 1st International Congress of Endometriosis and Minimally Invasive Gynecology (EMIG), Iran 2016 (Oral presentation).

**Somaieh Kazemnejad**. Skin bioimplants banking. 6th national congress of Burn. 2017. Mashhad, Iran.

**Somaieh Kazemnejad**. Stem cell therapy using menstrual blood stem cells in multiple animal models. 2017. Mashhad, Iran (Oral presentation).

**Somaieh Kazemnejad**. Ovary tissue engineering. ISERB 2017, Tehran, Iran (Oral presentation).

F. Arjmand, **S. Kazemnejad**. A novel three-dimensional environment for human blastocyst development up to 10 days post-fertilization. 33rd Annual Meeting of ESHRE, Geneva, Switzerland (Oral presentation)

M. Fathi-Kazerooni, M. Taghizadeh-Jahed, S. Khanjani, H. Golshahi, G. Tavoosidana, **S. Kazemnejad**. Higher restoration of liver fibrosis by stem cells derived from Menstrual Blood compared to those of Bone Marrow in mice model. 33rd Annual Meeting of ESHRE, Geneva, Switzerland (poster presentation)

Somaieh Kazemnejad. Main embryonic factors in recurrent implantation failure. ISERB 2018, Tehran, Iran (Oral presentation).

### **Institutional and technical Skills:**

- Design and fabrication of different scaffolds
- Tissue and cell culture
- Tissue engineering
- Cell therapy
- Stem cell culture, differentiation and banking
- Microinjection, IVF, Embryo transfer, embryo Hatching, embryo grading, Preimplantation Genetic Diagnosis (PGD), Embryo biopsy,...
- ELISA
- PCR, Real-time PCR
- Western Blotting, Immunocytochemistry, Immunohistochemistry

### **Patents:**

Efficient replacing of fetal bovine serum with human platelet releasate during propagation and differentiation of human bone marrow derived mesenchymal stem, 2008 (national).

- Liver engineered from human bone marrow mesenchymal stem cells on a nanofibrous scaffold, 2008. (national)
- Engineered tissue for treatment of cartilage Defects Using Constructs Composed of cells and scaffolds, 2014 (national).

- A bilayer nanofibrous scaffold composed of amniotic membrane and silk fibroin in order of wound healing, 2018 (national).

### **Member of Editorial board and/or Review board of scientific journals:**

- Tissue engineering
- Vox Sanguinis
- Avicenna Journal of Medical Biotechnology
- Journal of Reproduction and Infertility
- Translational medicine
- Cell transplantation
- Scientific reports

### **Other activities:**

- Establishment of Tissue Engineering lab in Avicenna Research Institute.
- Establishment of GMP-grade clean room for cell therapy and bioimplants in Avicenna Research Institute.
- Chief executive officer of Sina Tissue Engineering and Regeneration Company (STERCO).

### **Professional Affiliations:**

- Tissue Engineering and Regenerative Medicine Department, Reproductive Biotechnology Research Center, Avicenna Research Institute, ACECR, Tehran, Iran