

CURRICULUM VITAE

Personal information:

First name: Somaieh

Surname: Kazemnejad

Date of birth: 22/09/1979

Phone: 0098-21-22432020

Fax: 0098-21-22432021

E.mails: s.kazemnejad@avicenna.ac.ir, kazemnejad_s@yahoo.com

Education:

Ph.D. of Clinical Biochemistry, Tarbiat Modarres Univ. Tehran, Iran (2003-2008) (score: first rank, 18.72 from 20)

Experiences:

Research Activities:

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

Administration:

- Scientific member of Guilan University of Medical Science (2010-2012)
- Scientific member and researcher of Avicenna Research Institute (from 2012)
- Embryologist of Avicenna Infertility Clinic (from 2012)

Review board of scientific journals:

- Tissue engineering
- Vox Sanguinis
- Avicenna Journal of Medical Biotechnology
- Blood (khon)
- Journal of Reproduction and Infertility

Editorial Board of scientific journals:

- Avicenna Journal of Medical Biotechnology

- Journal of Reproduction and Infertility

Teaching activities:

- General Biochemistry, medical Biochemistry, Endocrinology, Practical Biochemistry for B.Sc students (2010-2012)
- Advanced Biology of Stem Cells (2012-2013)

Supervisor of M.Sc and Ph.D projects

- Study of Wnt/b-catenin signaling pathway in rat granulosa cells using human recombinant SFRP4 (finished).
- Study of recombinant human SFRP-4 on rat cultured granulosa cells survival (finished).
- Hepatic differentiation of menstrual blood derived stem cells (finished).
- Evaluation of hepatic specific genes in differentiated cells from menstrual blood on a nanofibrous scaffold. (finished).
- Neural differentiation Potential of Human Mesenchymal Stem Cells derived from Menstrual blood and bone Marrow (finished)
- Differential expression of glutathione S-transferases at protein and mRNA levels in hepatocytes derived from human menstrual blood stem cells (to be continued).
- Assessment of the impact of two different isolation methods on the differentiation potential of human exfoliated deciduous teeth (SHED) and adult dental pulp stem cells (DPSCs) (to be continued).

Coadvisor of M.Sc and Ph.D projects:

- 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 (Finished).
- Osteogenic differentiation of menstrual blood derived stem cells (finished).
- The study of phenotypic characteristics and cardiac differentiation potential of human menstrual blood derived stem cells (to be continued).

Professional membership:

- Member of Tissue engineering and regenerative medicine international society (TERMIS)

- Member of National Foundation of Choice Parts
- Member of Embryology Society

Conferences as Scientific Committee:

- The First Iranian congress on Progress in Tissue Engineering and Regenerative Medicine (2013)
- Bioethics (2012)

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. The 11th Royan International Twin Congress, 2010 (poster presentation).
- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, 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, Gharehbaghian A, Mohammadi Y, Amirizadeh N, kaviani S. Hepatic differentiation of human bone marrow mesenchymal stem cells on a biodegradable nanofibrous scaffold. The 8th Royan International Twin Congress, 2007. (Oral presentation)
- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirizadeh 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. 19th 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 10th Royan International Twin Congress. 2009.(poster presentation).

- Hossein Ghamartaj, Khanmohammadi Manijeh, Sahranavard Parisa, **Kazemnejad Somaieh,** Akhoondi Mohammadmehdi. Crosstalk between Wnt/ β catenin and Akt/PI3kinase pathways in relation with rat granulosa cells terminal differentiation and apoptosis. 4th 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, Zarnani AmirHasan, 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, Zarnani AH, Khanmohammadi M, **Kazemnejad S.** 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. 3rd 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. 3rd TERMIS world congress, 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- Tehrah (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).

Published Papers in International Journals:

- **Kazemnejad S**, Allameh A, Soleimani M, Gharehbaghian A, Mohammadi Y, Amirizadeh 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, GharehbaghianA, Mohammadi Y, Amirizadeh N and Shahnaz Esmaeli. 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, GharehbaghianA, Mohammadi Y, Amirizadeh 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 N and 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 Sangunis*. 2008 Aug;95(2):149-58.
- **Kazemnejad S**, Rasmi Y, Sharifi R, Allameh A. Class Pi of glutathione Stransferases. *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 bone marrow mesenchymal stem cells. *Iranian Journal of Biotechnology*. 2008, 6(1); 1-8.
- Jazayeri M, Allameh A, Soleimani M, Jazayeri SH, Piryaeei 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 β -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, Kourosh 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 Ebtakar, 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. In press.

-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. In press.

Published Book:

- Advanced Biology of Stem Cells. In press
- Chondrogenic Differentiation of Menstrual Blood derived Stem Cells in Nanofibrous Scaffolds. Methods in Molecular Biology. (Book Chapter)

Patents:

- Efficient replacing of fetal bovine serum with human platelet releasate during propagation and differentiation of human bone marrow derived mesenchymal stem (national).
- Liver engineered from human bone marrow mesenchymal stem cells on a nanofibrous scaffold. (national)

Honors and Awards:

- Selected as the distinguished researcher of Guilin Province in 2010.
- Selected as the distinguished researcher by the Guilan University of Medical Science.
- The second place of fundamental researches in the young section by the “22nd Khwarizmi Award” in 2008.
- Young Investigation Award of Asia Pacific Digestive Week Conference.