

CURRICULUM VITAE

Name: Shohreh Nikoo

Date of Birth: 13/4/1980

Sex: Female

Nationality: Iranian

E-mail: sh_nikoo2000@yahoo.com

Tel: +98 9124800107

Research Interests

- Tumor-Immune Interactions
- Autoimmunity
- Microbiota
- Immunoregulatory Mechanisms and Molecules
- Immunology of Pregnancy

Education

- **Ph.D. in Immunology**, Tarbiat Modarres University, Tehran, Iran (2006-2012)
 - Score: first rank
 - Research mentors: Dr. M. Ebtekar and Dr. AH. Zarnani
 - Thesis title: Functional evaluation of menstrual blood stromal stem cells from endometriosis patients in inducing regulatory T cells and the effect of Dioxin as an environmental toxin on this phenomenon.
- **M.Sc. in Immunology**, Tarbiat Modarres University. Tehran, Iran (2003-2006)
 - Score: first rank.
 - Research mentor: Dr. SM. Moazzeni
 - Thesis title: The Effect of Pregnant Mouse Serum on IDO Induction in Dendritic Cells.
- **B.Sc. in Cellular and Molecular Biology**, Shiraz University. Shiraz, Iran (1998-2002).

Previous Position

- Research Associate at Avicenna Research Institute, Tehran, Iran. (2012-2016)

Current Position

- Assistant Professor at Iran University of Medical Sciences, Tehran, Iran. (Since 2018)

Experiences

Research Activities:

- Immunobiology of dendritic cells
- Immunobiology of normal pregnancy.
- Immunobiology of menstrual blood stromal stem cells
- Immunology of endometriosis
- Immunology of tumor

Teaching activities:

- Reproductive Immunology course for Ph.D. students (2013, 2015, 2016, 2017)
- Microbiota course for Ph.D. students (2016, 2017)
- Cell proliferation assay techniques for Ph.D. students (2016, 2017)
- Immunology course for B.Sc. students (2010)

Institutional and technical experiments

- Tissue and cell culture
- Cell purification
- MACS
- Multi-color Flow cytometry
- Characterization of lymphocyte subpopulations (T cells and regulatory T cells)
- ELISA and ELISPOT
- Proliferation assays (MLR, LTT, MTT, XTT, CFSE)
- CTL assay
- Cell invasion and adhesion assays
- IHC, ICC
- Mouse handling
- Western blotting
- RT-PCR , Real-time PCR

Honors, Awards and Achievements

- Ranked the second in the national exam for entrance nation-wide M.Sc. program in Medical immunology (2003)
- Ranked the first in written and the fifth in total national exam for entrance nation-wide Ph.D. program in Medical immunology (2006)
- Scientific Committee of the second national congress of endometriosis (2013)
- Scientific Committee of 12th Iranian congress of immunology and allergy (2014)
- Scientific Committee of the 3rd National and the 1st International Congress on Endometriosis and Minimally Invasive Gynecology (2016)
- Scientific Committee of 14th Iranian congress of immunology and allergy (2018)
- Winner of the 2nd Yazd international student award in reproductive medicine, Yazd, Iran, May 11-13, 2007.
- Winner of a student grant in the 14th international congress of immunology, Kobe, Japan, August 22-27, 2010
- Question maker referee and question maker in 8th National Medical Sciences Student Olympiad

Expert reviewer activities –Journals

- Molecular Human Reproduction
- Journal of reproduction and infertility
- Avicenna Journal of Medical Biotechnology (AJMB)
- **Supervisor of M.Sc project**
- Dioxin effect on regulatory T cell induction in peripheral blood mono-nuclear cells of endometriosis patients (Mahsa Tanha, Islamic Azad University, Tehran)

- **Coadvisor of M.Sc project**

- The study of anti tumor effect of hAEC immunization on induced colon adenocarcinoma in BALB/c mice. (Meraj Tabatabaei, Shahid Beheshti University)
- Immunomodulatory effects of menstrual blood stromal stem cells on regulatory T lymphocytes induction.(Mehdi Aleahmad, Tehran university of medical sciences)

Presentations

- **Nikoo S.**, Moazzeni S.M., Bozorgmehr M., Zarnani A.H. The effect of pregnant mouse serum on IDO induction in dendritic cells. 2nd International student award and congress in reproductive medicine, May 11-13, 2007. **Fifth winner (Oral)**
- Bozorgmehr M., Moazzeni S.M., **Nikoo S.**, Zarnani A.H. The effect of pregnant mouse serum on dendritic cells in inducing T cell non-specific and specific responses. 2nd International student award and congress in reproductive medicine, May 11-13, 2007 (**Poster**).
- Bozorgmehr M., **Nikoo S.**, Aghdami N., Nikughoftar M., Moazzeni S.M. The functional and phenotypic comparison between splenic and bone marrow derived dendritic cells. 8th Iranian congress of immunology and allergy, Tehran, 16-18 July 2006 (**oral**).
- **Nikoo S.**, Moazzeni S.M., Bozorgmehr M., Zarnani A.H. The Effect of Pregnant Mouse Serum on IDO Induction in Dendritic Cells. 8th Iranian congress of immunology and allergy, Tehran, 16-18 July 2006 (**oral**).
- Bozorgmehr M., **Nikoo S.**, Moazzeni S.M., Zarnani A.H. Induction of antigen-specific T response by dendritic cells: effect of pregnant mouse serum. 9th Iranian congress of immunology and allergy, Tehran, Iran, June 17-19, 2008 (**Poster**).
- **Nikoo S.**, Moazzeni S.M., Bozorgmehr M., Zarnani A.H. Effect of Aged garlic on indoleamine 2,3-dioxygenase activity in mononuclear cells in vitro. 9th Iranian congress of immunology and allergy, Tehran, Iran, June 17-19, 2008 (**Poster**).
- Bozorgmehr M., **Nikoo S.**, Moazzeni S.M., Zarnani A.H. The study of pregnant mouse serum on dendritic cell in T lymphocyte induction and also the

production of IL-10 and IFN-gamma. 2nd Students Congress of North Universities of Medical Sciences, Ardabil, Iran, July 30-31, 2008 (**Third Winner, Oral**).

- **Nikoo S.**, Ebtekar M., Jeddi-Tehrani M., Vahedian Z., Akhondi M.A., Zarnani A.H. Immunophenotyping and functional study of menstrual blood-derived stromal stem cells. 8th international congress on Obstetrics and Gynecology, 5-9, Nov, 2009 (**Oral**).
- Zarnani A.H., Shojaeian J., Jeddi-Tehrani M., Kalantari A., **Nikoo S.**, Bozorgmehr M. Mutual helper effect in dendritic cell cell-based vaccines, a new strategy for simultaneous immunotherapy against tumors and infectious diseases. 9th international conference on New Trends in Immunosuppression and immunotherapy (Geneva), Feb , 2009.
- **Nikoo S.**, Zarnani A.H., Jeddi-Tehrani M., Vahedian Z., Ebtekar M. Regulatory function of menstrual blood-derived stromal stem cells. 10th Iranian congress of immunology and allergy, Tehran, Iran, May 2010 (**oral**).
- **Nikoo S.**, Zarnani A.H., Ebtekar M., Jeddi-Tehrani M., Bozorgmehr M., Vahedian Z. Menstrual blood-derived stromal stem cells: potential application for cell therapy. 14th International Congress of Immunology, Kansai, Japan, Aug 2010 (**Poster**).
- Moazzeni SM, Shojaeian J, Nikoo S, Bozorgmehr M, Zarnani AH. The study of immunosuppressive effect of pregnant mouse serum on dendritic cells. 16th congress of Iranian society for reproductive medicine. Yazd, Iran, Winter 2010. (Poster).
- **Nikoo S.**, Zarnani A.H., Jeddi-Tehrani M., Vahedian Z., Ebtekar M. Differential expression of CD9 and CD29 from patients with endometriosis. 9th international congress on Obstetrics and Gynecology, Nov, 2011 (**Oral**).
- **Nikoo S.**, Ebtekar M., Jeddi-Tehrani M., Ghasemi J., Zarnani A.H. The modulatory effect of TCDD on menstrual blood stromal stem cells. 11th Iranian congress of immunology and allergy, Tehran, Iran, April 2012. (**Oral**).
- **Nikoo S.**, Ebtekar M., Jeddi-Tehrani J., Zarnani A.H. Immunological evaluation of menstrual blood stromal stem cells in endometriosis patients: role of IDO and cytokines. 2nd national congress on endometriosis. Tehran, Iran, January 22-24 2013. (**Oral**)
- **Nikoo S.**, Ebtekar M., Jeddi-Tehrani J., Zarnani A.H. Effect of Dioxin on CD9 and CD29 expression by normal and endometriosis menstrual blood

- stromal stem cells. 2nd national congress on endometriosis. Tehran, Iran, January 22-24 2013. (**Oral**)
- **Nikoo S.**, Ebtekar M., Jeddi-Tehrani J., Zarnani A.H. Dioxin effect on immune system function in endometriosis patients. 2nd national congress on endometriosis. Tehran, Iran, January 22-24 2013. (**Oral**)
 - **Nikoo S.**, Ebtekar M, Jeddi-Tehrani M, Zarnani AH. Immunological evaluation and comparison of normal and endometriosis menstrual blood. 5th International student award and congress in reproductive medicine. Yazd, Iran, April 2013.(**Oral**)
 - **Nikoo S.**, Ebtekar M, Jeddi-Tehrani M, Ghasemi J, Zarnani AH. Effect of Dioxin on proliferation and invasion of normal and endometriosis menstrual blood stromal stem cells. 12th Iranian congress of immunology and allergy, Tehran, Iran, April 2014 (**Oral**).
 - Tanha M, **Nikoo S.**, Macrophage Migration Inhibitory Factor (MIF) as a Biomarker of Endometriosis. The 3rd National and the 1st International Congress on Endometriosis and Minimally Invasive Gynecology. Tehran, Iran, October 25-27, 2016 (**Poster**)
 - Tanha M, **Nikoo S.**, Dioxin Impacts on Immunological Aspects of Endometriosis. The 3rd National and the 1st International Congress on Endometriosis and Minimally Invasive Gynecology, Tehran, Iran, October 25-27, 2016 (**Poster**)
 - **Nikoo S** , Endometriosis and Microbiota: Future Perspectives, The 3rd National and the 1st International Congress on Endometriosis and Minimally Invasive Gynecology, Tehran, Iran, October 25-27, 2016 (**Oral**)
 - Tanha M, **Nikoo S** , Naji T, Zarnani A.H. Effect of LPS on regulatory T cell induction in peripheral blood mononuclear cells of endometriosis patients. 1st International Congress On Biomedicine, Tehran, Iran, December 18 - 21 2017 (**Poster**)
 - Mehdi Aleahmad, Mahmood Bozorgmehr, **Shohreh Nikoo**, Mohammad-Reza Shokri, Alireza Ghanavatinejad, Maryam Tavakoli, Somaieh Kazemnejad, Fazel Shokri, Amir Hassan Zarnani. Pro-inflammatory Milieu Makes Menstrual blood stem cells a Potent inducer of Function Regulatory T

cells. 14th Iranian congress of immunology and allergy, Tehran, Iran, April 2018 (**Oral**).

- Mohammad Reza Shokri, Mahmood Bozorgmehr, Alireza Ghanavatinejad, Mehdi Aleahmad, **Shohreh Nikoo**, Maryam Tavakoli, Somaieh Kazemnejad, Reza Falak, Fazel Shokri, Amir Hassan Zarnani. Menstrual blood-derived stem cells modulate functional features of natural killer cells. 14th Iranian congress of immunology and allergy, Tehran, Iran, April 2018 (**Oral**).
- Mahsa Tanha, **Shohreh Nikoo**, Tahereh Naji, Amir-hassan Zarnani. TCDD effects on induction of regulatory T cells in peripheral blood mononuclear cells in endometriosis patients. 14th Iranian congress of immunology and allergy, Tehran, Iran, April 2018 (**Oral**).
- Mahsa Tanha, **Shohreh Nikoo**, Tahereh Naji, Amir-Hassan Zarnani . Frequency of Regulatory T Cells in Peripheral Blood Mononuclear Cells (PBMCs) of Endometriosis Patients .4th International Congress on Reproduction. Tehran, Iran, April 2018 (**First winner, Poster**)

Articles: (Peer-reviewed)

1. Aleahmad M, Ghanavatinejad A, Bozorgmehr M, Shokri MR, **Nikoo S**, Tavakoli M, Kazemnejad S, Shokri F, Zarnani AH. Menstrual Blood-Derived Stromal Stem Cells Augment CD4+ T Cells Proliferation. Menstrual Blood-Derived Stromal Stem Cells Augment CD4+ T Cells Proliferation. Avicenna J Med Biotechnol. 2018 Jul-Sep;10(3):183-191.
2. M Tabatabaei, N Mosaffa, R Ghods, **S Nikoo**, S Kazemnejad , M Khanmohammadi, E Mirzadeghan, A Mahmoudi ,MR Bolouri, R Falak4, B Keshavarzi, M Ramezani, A H Zarnani. Vaccination with Human Amniotic Epithelial Cells Confer Effective Protection in a Murine Model of Colon Adenocarcinoma. International Journal of Cancer. 2017 Nov 15. doi: 10.1002/ijc.31159. (IF:6.5)
3. Hosseini S, Shokri F, Ansari Pour S, Jeddi-Tehrani M, **Nikoo S**, Yousefi M, Zarnani A.H. A Shift in the Balance of T17 and Treg Cells in Menstrual Blood of Women with Unexplained Recurrent Spontaneous Abortion. J Reprod Immunol. 2016 Aug;116:13-22. doi: 10.1016/j.jri.2016.03.001. Epub

2016 Mar 11. (IF:2.9)

4. Bozorgmehr M, Moazzeni SM, Salehnia M, Sheikhian A, **Nikoo S**, Zarnani AH. Menstrual blood-derived stromal stem cells inhibit optimal generation and maturation of human monocyte-derived dendritic cells. *Immunol Lett.* 162(2 Pt B):239-46, 2014. (IF:2.8)
5. **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.* 20(9):905-18, 2014. (IF:3.5)
6. Tabatabaei M, Mosaffa N, **Nikoo S**, Bozorgmehr M, Ghods R, Kazemnejad S, Rezania S, Keshavarzi B, Arefi S, Ramezani-Tehrani F et al. Isolation and partial characterization of human amniotic epithelial cells: the effect of trypsin. *Avicenna J Med Biotechnol.*6:10-20, 2014.
7. Rahimi M, Mohseni-Kouchesfehani H, Zarnani AH, Mobini S, **Nikoo S**, Kazemnejad S. Evaluation of menstrual blood stem cells seeded in biocompatible Bombyx mori silk fibroin scaffold for cardiac tissue engineering. *J Biomater Appl.* 19;29(2):199-208, 2014. (IF:2.7)
8. Bozorgmehr M, Zarnani AH, **Nikoo S**, Moazzeni SM. Suppressive effect of pregnant serum on murine dendritic cell function. *J Obstet Gynaecol Res.*38:797-803, 2012. (IF:1)
9. **Nikoo S**, Ebtekar M, Jeddi-Tehrani M, Shervin A, Bozorgmehr M, Kazemnejad S, Zarnani AH. Effect of menstrual blood-derived stromal stem cells on proliferative capacity of peripheral blood mononuclear cells in allogeneic mixed lymphocyte reaction. *J Obstet Gynaecol Res.*38:804-9, 2012. (IF:1)
10. Moazzeni SM, Shojaeian J, **Nikoo S**, Bozorgmehr M, Zarnani A.H. THE STUDY OF IMMUNOSUPPRESSIVE EFFECT OF PREGNANT MOUSE SERUM ON DENDRITIC CELLS. *Reproductive biomedicine online.*2010. (IF:3.2)
11. Shojaeian J, Jeddi-Tehrani M, Dokouhaki P, Mahmoudi AR, Ghods R, Bozorgmehr M, **Nikoo S**, Bayat AA, Akhondi MM, Ostadkarampour M et al.

Mutual helper effect in copulsing of dendritic cells with 2 antigens: a novel approach for improvement of dendritic-based vaccine efficacy against tumors and infectious diseases simultaneously. *J Immunother.*32:325-32, 2009. (IF:3.2)

12. **Nikoo S**, Bozorgmehr M, Namdar Ahmadabad H, Hassan ZM, Moazzeni SM, Pourpak Z, Ghazanfari T. The 14kDa protein molecule isolated from garlic suppresses indoleamine 2, 3-dioxygenase metabolites in mononuclear cells in vitro. *Iran J Allergy Asthma Immunol.*7:203-8, 2008. (IF:1)
13. Bozorgmehr M., Moazzeni SM., **Nikoo S**., Zarnani A.H., Dendritic cells and antigen-specific T cell responses: Effect of pregnant mouse serum. *Medical journal of Iran University of medical sciences*, 57, 14, 1386, 41-52.
14. **Nikoo S**., Moazzeni SM., Bozorgmehr M., Zarnani A.H., Effect of pregnant mice serum on IDO induction by Dendritic cells. *Medical journal of Reproduction and Infertility*, 1385, autumn, 187-197.
15. Shojaeian J, Moazzeni SM, **Nikoo S**, Bozorgmehr M, Nikougofar M, Zarnani AH. Immunosuppressive effect of pregnant mouse serum on allostimulatory activity of dendritic cells. *J Reprod Immunol.*75:23-31, 2007. (IF:2.9)

Other Skills

- **Languages:** English (fluent) and Persian (native)
- **Softwares:**
 - Densitometry software: Alpha EaseFC
 - Flow cytometry software: Flowjo, Flowmax
 - Statistical software: SPSS, GraphPad Prism
 - Microsoft Office
 - REST (Real-time PCR results analysis)