# Curriculum Vitae Sara Soudi, Ph.D.

# **Personal Information**

Name:Sara Soudi		
Ph.D. in Immunology		
Assistant Professor at Tarbiat Modares University		
M.C. NO:L- 3269		
Date of Birth: 27.6.1358 / Tuesday, September18, 1979		
Marital Status: married		
ORCID ID: https://orcid.org/0000-0002-8978-3958		
Scopus Author ID:		
Google Schola: https://scholar.google.com/citations?user=WpY8Ln4AAAJ&hl=en		

# **Contact Information**

Address: Department of Immunology, Faculty of Medical sciences, Tarbiat ModaresUniversity, Tehran, Iran
P.O. Box: 331-14115
Fax: +98 21 82884555
Email1: soudi@modares.ac.ir
Email2: <u>srsoudi@gmail.com</u>

Education and	Research Experience
December 2014 – present	Assistant Professor: Tarbiat Modares University, Department of Immunology, Tehrān,
	Tehrān, Iran
September2007-	PhD Student: Tarbiat Modares University, Department of Immunology, Tehrān, Iran
December 2012	
September 2005 – March 2007	Researcher: Royan Institute, Institute for Stem Cell Biology and Technology, Iran
September 2002- Jun 2005	<i>M.Sc.</i> <b>Student:</b> Tarbiat Modares University, Department of Immunology, Tehrān, Iran
Jan 1998- June 2001	B.Sc.: Molecular Cell Biology, Alzahra University, Tehran, Iran

#### Administrative Activities:

- 1. Secretary of Junior member committee of Iranian Society of Immunology and Allergy, 2018- now
- 2. Member of the Central Council of the Alumni Association of Tarbiat Modares University
- 3. Secretary of the Alumni Committee of the Faculty of Medical Sciences

# Research Projects

2002-2006	Comparison the Protective Effect of Mucosal BCG Vaccination with Subcutaneous Against Leishmania		
Major Infection in Susceptible BALB/c Mice			
2007-2011	Establishment and differentiation of mouse embryonic stem cell		

#### **Publications**

#### **Book:**

1. Chapter book, Immunomodulatory Properties of Perinatal Tissue-Derived Mesenchymal Stem Cells, Perinatal Tissue-Derived Stem Cells, Alternative Sources of Fetal Stem Cells, Springer International Publishing Switzerland 2016.

#### Articles:

- 1. MSCs loaded with oncolytic reovirus: migration and in vivo virus delivery potential for evaluating anti-cancer effect in tumor-bearing C57BL/6 mice.SM Seyed-Khorrami, H Soleimanjahi, S Soudi, A Habibian.Cancer Cell International 21 (1), 1-19,2021
- 2. The Effect of Antigen Dose and Antigen Presenting Process on T Cell Stimulation: A Method for Enrichment of TB10. 4 Antigen-specific T-cell Clones.M Motiee, AZ Hosseini, S Soudi, SM Hassanzadeh. Iranian Journal of Allergy, Asthma and Immunology, 1-12,2021
- 3. Vibrio cholerae toxin coregulated pilus provokes inflammatory responses in Coculture model of Caco-2 and peripheral blood mononuclear cells (PBMC) leading to .M Ghasemi, B Bakhshi, R Khashei, S Soudi, M Boustanshenas. Microbiology and Immunology 65 (6), 238-244,2021
- 4. Mesenchymal stem cells support delivery and boost the efficacy of oncolytic reoviruses in TC-1 tumor cells.RS Banijamali,H Soleimanjahi, S Soudi, H Karimi.Journal of Cellular Biochemistry. 2021
- 5. Comparison of the Effect of Adipose Mesenchymal Stem Cells-derived Secretome with and without Reovirus in CT26 Cells. A Rezazadeh, H Soleimanjahi, S Soudi, A Habibian. Archives of Razi Institute.2021
- 6. In vitro and in vivo evaluation of anti-tumoral effect of M1 phenotype induction in macrophages by miR-130 and miR-33 containing exosomes. M Moradi-Chaleshtori, M Bandehpour, S Soudi, S Mohammadi-Yeganeh, ...Cancer Immunology, Immunotherapy 70 (5), 1323-1339,3,2021.
- Imipenem alters systemic and liver inflammatory responses in CLP-induced sepsis mice in a dose-dependent manner. A Khosrojerdi, S Soudi, AZ Hosseini, SG Khaligh, SM Hashemi. International Immunopharmacology 93, 107421 2021
- 8. Immunomodulatory and therapeutic effects of mesenchymal stem cells on organ dysfunction in sepsis. A Khosrojerdi, S Soudi, AZ Hosseini, F Eshghi, A Shafiee, SM Hashemi. Shock 55 (4), 423-440, 2021
- 9. phage surface induced modulation of inflammatory responses. Z Safari, M Sadeghizadeh, AZ Hosseini, H Bardaania, S Soudi. 2021
- 10.Mesenchymal stem cell-derived extracellular vesicles conditionally ameliorate bone marrow failure symptoms in an immune-mediated aplastic anemia mouse model.MA Gholampour, S Abroun, R Nieuwland, SJ Mowla, S Soudi .Journal of Cellular Physiology.3,2021
- 11. In vitro and in vivo evaluation of anti-tumoral effect of M1 phenotype induction in macrophages by miR-130 and miR-33 containing exosomes (Nov, 10.1007/s00262-020-02762-x, 2020).M Moradi-Chaleshtori, M Bandehpour, S Soudi, S Mohammadi-Yeganeh, ...CANCER IMMUNOLOGY IMMUNOTHERAPY,2020
- 12. Modulatory effect of Vibrio cholerae toxin co-regulated pilus on mucins, toll-like receptors and NOD genes expression in co-culture model of Caco-2 and peripheral blood ...M Ghasemi, B Bakhshi, R Khashei, S Soudi, Microbial Pathogenesis 149, 104566,2020
- 13. Hypothesis for the management and treatment of the COVID-19-induced acute respiratory distress syndrome and lung

- injury using mesenchymal stem cell-derived exosomes.M Taghavi-Farahabadi, M Mahmoudi, S Soudi, SM Hashemi. Medical hypotheses 144, 109865,17, 2020
- 14. Adipose derived mesenchymal stem cell exosomes loaded with miR-10a promote the differentiation of Th17 and Treg from naive CD4+ T cell. Z Bolandi, N Mokhberian, M Eftekhary, K Sharifi, S Soudi, H Ghanbarian, ...Life Sciences 259, 118218,8,2020
- 15. Kinetics of Oncolytic Reovirus T3D Replication and Growth Pattern in Mesenchymal Stem Cells. RS Banijamali, H Soleimanjahi, S Soudi, H Karimi, A Abdoli, ...Cell j 22 (3), 283-292,8,2020
- 16. Studying the role of chitosan nanoparticle loaded with Leishmania major Secretory and excretory antigens on the number of apoptotic macrophages in parasite sensitive mouse. E Feizabadi, A Zavaran Hosseini, S Soudi, A Khosrojerdi. Daneshvar Medicine: Basic and Clinical Research Journal 26 (6), 9-18,2,2020
- 17. Mesenchymal stem cell therapies for COVID-19: Current status and mechanism of action. S Sadeghi, S Soudi, A Shafiee, SM Hashemi. Life Sciences, 118493 9.2020
- 18. miRNA-146a Improves Immunomodulatory Effects of MSC-derived Exosomes in Rheumatoid Arthritis. F Tavasolian, AZ Hosseini, S Soudi, M Naderi. Current Gene Therapy 20 (4), 297-312,2020
- A Systems Biology Approach for miRNA-mRNA Expression Patterns Analysis in Rheumatoid Arthritis. F Tavasolian, AZ Hosseini, S Soudi, M Naderi, A Sahebkar. Combinatorial Chemistry & High Throughput Screening.
  2020
- 20. Proposing a tandem AND-gate CAR T cell targeting glioblastoma multiforme. M Sabahi, P Jabbari, MA Haghighi, S Soltani, S Soudi, F Rahmani, ...Medical hypotheses 137, 109559,2020
- 21. Antibacterial and antibiofilm activity of bone marrow-derived human mesenchymal stem cells secretome against Vibrio cholera.M Bahroudi, B Bakhshi, S Soudi, S Najar-Peerayeh. Microbial pathogenesis 139, 103867,2020
- 22. Unfolded protein response-mediated modulation of mesenchymal stem cells. F Tavasolian, AZ Hosseini, A Mirzaei, E Abdollahi, P Jandaghi, S Soudi, ...IUBMB life 72 (2), 187-197,2020
- 23. The Impact of Immune Cell-derived Exosomes on Immune Response Initiation and Immune System Function. F Tavasolian, AZ Hosseini, M Rashidi, S Soudi, E Abdollahi, ...Current pharmaceutical design,4, 2020
- 24. A New Approach to Monitoring and Evaluation of Cecal Ligation and Puncture Sepsis Model.A Khosrojerdi, S Soudi, A Zavaran Hosseini, SM Hashemi. Immunoregulation 3 (2), 97-106,2020
- 25. Intralesional Injection of Mouse Mesenchymal Stem Cells Reduces IL-10 Production and Parasite Burden in L. major Infected BALB/c Mice.E Zanganeh, S Soudi, AZ Hosseini. Cell Journal (Yakhteh) 22 (Suppl 1), 11,2020
- Repeated intravenous injection of adipose tissue derived mesenchymal stem cells enhances Th1 immune responses in Leishmania major-infected BALB/c mice. E Zanganeh, S Soudi, AZ Hosseini, A Khosrojerdi.Immunology letters 216, 97-105, 2019
- Investigating the route of administration and efficacy of adipose tissue-derived mesenchymal stem cells and conditioned medium in type 1 diabetic mice.SM Hashemi, ZM Hassan, N Hossein-Khannazer, AA Pourfathollah, ...Inflammopharmacology, 1-17,7,2019
- 28. The Effect of Interval Training on the Expression of Tumor Suppressor Gene, Systemic Inflammation, and Tumor Volume in Breast Cancer–Bearing BALB/c Mice. F Sadeghipoor Vojdani, H Agha-Alinejad, M Molanouri Shamsi, S Soudi, ...Iranian Quarterly Journal of Breast Disease 12 (3), 17-25,2019
- 29. Promotion of angiogenesis by M13 phage and RGD peptide in vitro and in vivo. Z Safari, S Soudi, N Jafarzadeh, AZ Hosseini, E Vojoudi, M Sadeghizadeh. Scientific reports 9 (1), 1-13,2019
- 30. Effect of Intra-Peritoneal Injection of Chitosan Nanoparticle Loaded with Leishmania major Excretory-Secretory Antigens on Macrophage Function in Exposure to Parasites in BALB ...E Feizabadi, A Zavaran Hosseini, S Soudi. Research in Medicine 43 (2), 97-104,2019
- 31. Alteration of serum levels of cytokines in schizophrenic patients before and after treatment with risperidone. E Azizi, AZ

- Hosseini, S Soudi, AA Noorbala.Iranian Journal of Allergy, Asthma and Immunology, 262-268,2019
- 32. Tumor-derived exosomal microRNAs and proteins as modulators of macrophage function.M Moradi-Chaleshtori, SM Hashemi, S Soudi, M Bandehpour, .Journal of cellular physiology 234 (6), 7970-7982,14,2019
- 33. A simple and highly efficient method for transduction of human adipose-derived mesenchymal stem cells. Z Bolandi, SMA Hosseini Rad, S Soudi, SM Hashemi, H Ghanbarian. Journal of cellular biochemistry 120 (2), 1726-1734,2019
- 34. Effects of exercise training and supplementation with selenium nanoparticle on T-helper 1 and 2 and cytokine levels in tumor tissue of mice bearing the 4 T1 mammary carcinoma.MM Shamsi, S Chekachak, S Soudi, R Gharakhanlou, LBS Quinn, ...Nutrition 57, 141-147,21,2019
- 35. Effect of efferocytosis of apoptotic mesenchymal stem cells (MSCs) on C57BL/6 peritoneal macrophages function
- MG Piraghaj, S Soudi, H Ghanbarian, Z Bolandi, S Namaki, SM Hashemi, Life sciences 212, 203-212, 2018
- 36. Immunomodulatory effects of mesenchymal stem cell-derived exosomes on experimental type-1 autoimmune diabetes
- S Nojehdehi, S Soudi, A Hesampour, S Rasouli, M Soleimani, ....Journal of Cellular Biochemistry 119 (11), 9433-9443,2018
- 37. Evaluation of activity of peritoneal macrophages in mouseC57BL/6 after phagocytosis of apoptosis of WJ MSC
- S Soudi, H Ghanbarian. Research in Medicine 42 (3), 160-166, 2018
- 38. The Effect of Oncolytic Reovirus Infection on Nitric Oxide Secretion and Induction of Apoptosis in Adipose Tissue-Derived Mesenchymal Stem Cells.RS Banijamali, H Soleimanjahi, S Soudi, H Karimi. Iranian Journal of Medical Microbiology 12 (3), 218-229,2018
- 39. Comparision of the Effects of Leishmania Soluble Antigen (LSA) and Lipopolysaccharide (LPS) on C57BL/6 Mice Macrophage Function.Z Khosrowpour, S Soudi, SM Hashemi. Immunoregulation 1 (1), 39-44,2018
- 40. The anti-apoptotic and anti-inflammatory effect of Lactobacillus acidophilus on Shigella sonnei and Vibrio cholerae interaction with intestinal epithelial cells: SZ Alamdary, B Bakhshi, S Soudi. Plos one 13 (6), e0196941,2018
- 41. Enhancement of Th1 immune response against Leishmania cysteine peptidase A, B by PLGA nanoparticle
- H Noormehr, AZ Hosseini, S Soudi, F Beyzay. International immunopharmacology 59, 97-105,2018
- 42. Double Role of Mesenchymal Stem Cells in Therapy and Induction of Tumors.H Soleimanjahi, A Rezazadeh, S Soudi, A Habibian, H Karimi.Journal of Medical Council of Iran 36 (3), 141-145,2018
- 43. Electrospun polyethersolfone nanofibrous membrane as novel platform for protein immobilization in microfluidic systems
- M Mahmoudifard, M Vossoughi, S Soudi, M Soleimani. Journal of Biomedical Materials Research Part B: Applied Biomaterials 106,13, 2018
- 44. The Effect of Endurance Interval Training with Selenium Nanoparticles on Skeletal Muscle Cachexia in Mice with Breast Cancer.S Chekachak, M Molanouri Shamsi, S Soudi, K Ranjbar.Journal of Applied Exercise Physiology 13 (26), 67-77,2018
- 45. Investigating The Effect of Aerobic Interval Training with Selenium Nanoparticles on the Content of IL-6, TNF-α and IL-4 cytokines in spleen tissue of Mice with Breast Cancer.S Chekachak, M MolanouriShamsi, S Soudi. Journal of Fasa University of Medical Sciences 8 (1), 608-617,2018
- 46. The Dual Role of Inflammatory Responses following Vibrio cholerae Infection in Cholerae pathogenesis. A Moulazade, S Soudi, B BakhshiJournal of Fasa University of Medical Sciences 7 (3), 297-306,2017
- 47. Pretreatment of Mesenchymal Stem Cells With Leishmania major Soluble Antigens Induce Anti-Inflammatory Properties in Mouse Peritoneal Macrophages.Z Khosrowpour, SM Hashemi, S Mohammadi-Yeganeh, S Soudi. Journal of cellular biochemistry 118 (9), 2764-2779,2017

- 48. Alpha alumina nanoparticle conjugation to cysteine peptidase A and B: an efficient method for autophagy induction. F Beyzay, AZ Hosseini, S Soudi. Avicenna journal of medical biotechnology 9 (2), 71,2017
- 49. Two triacylglycerol pathway genes, CTDNEP1 and LPIN1, are down-regulated by hsa-miR-122-5p in hepatocytes.M Naderi, A Pazouki, E Arefian, SM Hashemi, F Jamshidi-Adegani, ...Archives of Iranian medicine 20 (3), 2017
- 50. Combined effect of aerobic interval training and selenium nanoparticles on expression of IL-15 and IL-10/TNF-α ratio in skeletal muscle of 4T1 breast cancer mice with cachexia.MM Shamsi, S Chekachak, S Soudi, LS Quinn, K Ranjbar, J Chenari, .Cytokine 90, 100-108,2017
- 51. Assessment of aerobic training with selenium nanoparticles supplementation effects on cytokines levels of liver tissue in 4T1 breast cancer mice.S Chekachak, SM Molanouri, S Soudi.Iranian Journal of Endocrinology and Metabolism 19 (2),2017
- 52. In vivo immunomodulatory effects of adipose-derived mesenchymal stem cells conditioned medium in experimental autoimmune encephalomyelitis.F Yousefi, M Ebtekar, S Soudi, M Soleimani, SM Hashemi.Immunology letters 172, 94-105,2016
- 53. Study the effect of cell-to-cell contact of naive T cells and BCG stimulated fibroblasts on regulatory T cell induction. A Zavaran Hosseini, S Soudi, S Noujedehi. Research in Medicine 39 (4), 169-176, 2016
- 54. Mesenchymal stem cells alter macrophage immune responses to Leishmania major infection in both susceptible and resistance mice, S Dameshghi, A Zavaran-Hosseini, S Soudi, FJ Shirazi, S Nojehdehi, Immunology letters 170, 15-26,2016
- 55. Development of insulin resistance through induction of miRNA-135 in C2C12 cells.M Honardoost, E Arefian, M Soleimani, S Soudi, MR Sarookhani.Cell Journal (Yakhteh) 18 (3), 353,2016
- 56. Efficient protein immobilization on polyethersolfone electrospun nanofibrous membrane via covalent binding for biosensing applications.M Mahmoudifard, S Soudi, M Soleimani, S Hosseinzadeh, E Esmaeili, ...Materials Science and Engineering: C 58, 586-594,2016
- 57. Cytocompatibility of a conductive nanofibrous carbon nanotube/poly (L-Lactic acid) composite scaffold intended for nerve tissue engineering.M Kabiri, S Oraee-Yazdani, M Dodel, H Hanaee-Ahvaz, S Soudi, ...EXCLI journal 14, 851,2015
- 58. The effects of plasma treated electrospun nanofibrous poly (ε-caprolactone) scaffolds with different orientations on mouse embryonic stem cell proliferation.N Abbasi, S Soudi, N Hayati-Roodbari, M Dodel, M Soleimani.Cell Journal (Yakhteh) 16 (3), 245,2014
- 59. Comparison of in vivo immunomodulatory effects of intravenous and intraperitoneal administration of adipose-tissue mesenchymal stem cells in experimental autoimmune. F Yousefi, M Ebtekar, M Soleimani, S Soudi, SM HashemiInternational Immunopharmacology 17 (3), 608-616,2013
- 60. Comparative immunomodulatory properties of adipose-derived mesenchymal stem cells conditioned media from BALB/c, C57BL/6, and DBA mouse strains. SM Hashemi, ZM Hassan, AA Pourfathollah, S Soudi, A Shafiee, ... Journal of cellular biochemistry 114 (4), 955-965, 2013
- 61. Comparative study of the effect of LPS on the function of BALB/c and C57BL/6 peritoneal macrophages .S Soudi, A Zavaran-Hosseini, ZM Hassan, M Soleimani, FJ Adegani, ...Cell Journal (Yakhteh) 15 (1), 45,2013.
- 62. In vitro immunomodulatory properties of osteogenic and adipogenic differentiated mesenchymal stem cells isolated from three inbred mouse strains.SM Hashemi, ZM Hassan, AA Pourfathollah, S Soudi, A Shafiee, .Biotechnology letters 35 (1), 135-142,2013
  - 63. Cloning and expression of Leishmania infantum LPG3 gene by the lizard Leishmania expression system.L Pirdel, AZ Hosseini, B Kazemi, M Rasouli, M Bandehpour, S Soudi. Avicenna journal of medical biotechnology 4 (4), 186,2012
  - 64. Effective combination of hydrostatic pressure and aligned nanofibrous scaffolds on human bladder smooth muscle cells: implication for bladder tissue engineering.HH Ahvaz, M Soleimani, H Mobasheri, B Bakhshandeh, N Shakhssalim, ...Journal of Materials Science: Materials in Medicine 23 (9), 2281-2290 23 2012
  - 65. Prediction of oocyte developmental competence in ovine using glucose-6-phosphate dehydrogenase (G6PDH) activity determined at retrieval time. A Mohammadi-Sangcheshmeh, M Soleimani, H Deldar, M Salehi, ...Journal of assisted

- reproduction and genetics 29 (2), 153-158,2012
- 66. Co-administration of rectal BCG and autoclaved Leishmania major induce protection in susceptible BALB/c mice.S Soudi, AZ Hosseini, SM Hashemi. Parasite immunology 33 (10), 561-571,2011
- 67. The promotion of stemness and pluripotency following feeder-free culture of embryonic stem cells on collagen-grafted 3-dimensional nanofibrous scaffold. SM Hashemi, S Soudi, I Shabani, M Naderi, M Soleimani. Biomaterials 32 (30), 7363-7374 82 2011
- 68. Antileishmanial effect of Echinacea purpurea root extract cultivated in Iran.S Soudi, SM Hashemi, A Zavaran Hosseini, A Ghaemi, ....Iranian Journal of Pharmaceutical Research, 147-149,22,2010
- Combined exercise training reduces IFN-γ and IL-17 levels in the plasma and the supernatant of peripheral blood mononuclear cells in women with multiple sclerosis. Z Golzari, F Shabkhiz, S Soudi, MR Kordi, SM Hashemi. International immunopharmacology 10 (11), 1415-1419,2010
- 70. N-terminally fusion of Her2/neu to HSP70 decreases efficiency of Her2/neu DNA vaccine.N Pakravan, S Soudi, ZM Hassan.Cell Stress and Chaperones 15 (5), 631-638,2010
- 71. Echinacea purpurea polysaccharide reduces the latency rate in herpes simplex virus type-1 infectionsA Ghaemi, H Soleimanjahi, P Gill, E Arefian, S Soudi, Z Hassan. Intervirology 52 (1), 29-34,2009
- 72. In vitro differentiation of human cord blood-derived unrestricted somatic stem cells into hepatocyte-like cells on poly (ε-caprolactone) nanofiber scaffolds.SM Hashemi, M Soleimani, SS Zargarian, V Haddadi-Asl, N Ahmadbeigi, ...Cells Tissues Organs 190 (3), 135-149,2009
- 73. Comparison between the Effect of Intranasal and Subcutaneous BCG Immunization on Nitric Oxide Production in Macrophages and Parasite Burden in Infected BALB/c Mice with ...S Soudi, A Zavaran Hosseini, S Rafati, R Hashemi Fesharaki, ...Daneshvar Medicine: Basic and Clinical Research Journal 15 (3), 45-54,2008
- 74. The effect of vaccination with the lysate of heat-shocked tumor cells on nitric oxide production in BALB/c mice with fibrosarcoma tumor.SM Hashemi, ZM Hassan, S Soudi, S Shahabi. Cell biology international 32 (7), 835-840,2008
- 75. Study the Effect of Echinacea purpurea extract on cellular delayed type hypersensitivity and splenocyte proliferation in BALB/c mice.SM Hashemi, S Soudi, A Ghaemi, H Soleimanjahi, ZM Hassan.Yakhteh 9 (4), 254-261,2008
- 76. Prophylactic effects of Echinacea purpurea polysaccharide against lethal ocular herpes simplex virus type IA Ghaemi, H Soleimanjahi, P Gill, E Arefian, S Soudi.Saudi medical journal 29 (8), 1204-1206,2008
- 77. Induction of humoral and cellular immunity against latent HSV-1 infections by DNA immunization in BALB/c mice
- 78. A Ghaemi, H Soleimanjahi, T Bamdad, S Soudi, E Arefeian, SM Hashemi, ...Comparative immunology, microbiology and infectious diseases 30 (4), 197-210,2007
- 79. Evaluation of anti-tumor effects of tumor cell lysate enriched by HSP-70 against fibrosarcoma tumor in BALB/c mice.SM Hashemi, ZM Hassan, S Soudi, T Ghazanfari, M Kheirandish, ...International Immunopharmacology 7 (7), 920-927,2007
- 80. Comparison the Effect of the Rectal and Subcutaneous BCG Immunization on Nitric Oxide Production in Peritoneal Macrophages of BALB/c Mice Infected with Leishmania Major. S SOUDI, SM HASHEMI, HA ZAVARAN, FR HASHEMI, K Esmaeilnia, ...KOWSAR MEDICAL JOURNAL 11 (4), 305-313.2007