

## Sayed-hamidreza Mozhgani

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*Assistant professor, Department of Microbiology,  
School of Medicine,  
Alborz University of Medical Sciences,  
Karaj, Iran.*

***Date of Birth:*** Aug 10th, 1984

***Gender:*** Male

***Country of Citizenship:*** Iran

***Marital Status:*** Single

***Cell phone:*** (+98) 9126618743

***Email:*** [hamidrezamozhgani@gmail.com](mailto:hamidrezamozhgani@gmail.com)



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### **Education**

- Ph.D in Medical virology, (2013-17), Department of Virology, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran

### **Professional services and Administrative positions**

- Director of Virology Laboratory of Imam Ali Hospital, Alborz University of Medical Sciences, Karaj, Iran.
- Non-communicable Diseases Research Center, Alborz University of Medical Sciences, Karaj, Iran.
- Research Center for Clinical Virology, Tehran University of Medical Sciences, Tehran, Iran.
- Researcher in chief and supervisor on Human T lymphotropic Virus (HTLV).
- Head, Exceptional Talents, Alborz University of Medical Sciences, Karaj, Iran.

## **Research Expertise and Interests**

- Virus-Host cell interaction
- Meta-Analysis of biological high-throughput datasets
- Meta-Analysis of low-throughput datasets
- Network modeling in terms of cell signaling and Systems biology
- Molecular epidemiology, phylodynamics analysis and evolution of viruses
- Qualitative and quantitative diagnosis of viral disease
- Animal cell culture

## **Publications**

***Citations: 313***

***h-index: 11 i10-index: 14***

54- Zarei-Ghobadi M, Sheikhi M, Teymoori-Rad M, Yaslianifard S, Norouzi M, Yaslianifard S, , **Mozhgani SH**, et al. **HTLV-1-associated myelopathy/tropical spastic paraparesis (HAM/TSP) versus adult T-cell leukemia/lymphoma (ATLL)**. BMC Res Notes. 2021;14(1):109.

53- Zarei Ghobadi M, **Mozhgani SH**, Erfani Y. **Identification of dysregulated pathways underlying HTLV-1-associated myelopathy/tropical spastic paraparesis through co-expression network analysis**. J Neurovirol. 2021.

52- Zarei Ghobadi M, Emamzadeh R, Teymoori-Rad M, **Mozhgani SH**. **Decoding pathogenesis factors involved in the progression of ATLL or HAM/TSP after infection by HTLV-1 through a systems virology study**. Virol J. 2021;18(1):175.

51- Siami Z, Aghajanian S, Mansouri S, Mokhames Z, Pakzad R, Kabir K, , **Mozhgani SH**, et al. **Effect of Ammonium Chloride in addition to standard of care in outpatients and hospitalized COVID-19 patients: A randomized clinical trial**. International Journal of Infectious Diseases. 2021;108:306-8.

50- Sharifinejad N, **Mozhgani SH**, Bakhtiyari M, Mahmoudi E. **Association of LRRK2 rs11564258 single nucleotide polymorphisms with type and extent of gastrointestinal mycobacterium in ulcerative colitis: a case-control study**. Gut Pathog. 2021;13(1):56.

49- Shadabi S, Delrish N, Norouzi M, Ehteshami M, Habibian-Sezavar F, Pourrezaei S, , **Mozhgani SH**, et

- al. **Comprehensive high-throughput meta-analysis of differentially expressed microRNAs in transcriptomic datasets reveals significant disruption of MAPK/JNK signal transduction pathway in Adult T-cell leukemia/lymphoma.** Infect Agent Cancer. 2021;16(1):49.
- 48- **Mozhgani SH**, Rajabi F, Qurbani M, Erfani Y, Yaslianifard S, Moosavi A, et al. **Human Herpesvirus 6 Infection and Risk of Chronic Fatigue Syndrome: A Systematic Review and Meta-Analysis.** Intervirology. 2021.
- 47- **Mozhgani SH**, Keshavarz M, Mousavi N, Namdari H, Salimi V, Mokhtari-Azad T, et al. **Frequent detection of enterovirus D68 and rhinovirus type C in children with acute respiratory infections.** Eur J Clin Microbiol Infect Dis. 2021;40(3):637-42.
- 46- Mahmoudi E, **Mozhgani SH**, Sharifinejad N. **The role of mycobiota-genotype association in inflammatory bowel diseases: a narrative review.** Gut Pathog. 2021;13(1):31.
- 45- Khalkhali P, Khavandegar A, **Mozhgani SH**, Teimoori A, Moradi A, Ajorloo M, et al. **Genotyping and sequence characterization of the NSP4 gene of human group A rotavirus strains in Northern Iran.** J Med Virol. 2021;93(8):4824-30.
- 44- Kaffashi A, Huang JB, Bairami A, Mehrabadi MHF, Yaslianifard S, Bashashati M, , **Mozhgani SH**, et al. **Complete genome sequencing and molecular characterization of SARS-COV-2 from COVID-19 cases in Alborz province in Iran.** Heliyon. 2021;7(9).
- 43- Hatatian N, Bosstani R, Mohammadi A, Mehraban S, Mahdifar M, Zemorshidi F, **Mozhgani SH**, et al. **Evaluation of interleukin-32 and cyclooxygenase-2 expression in HAM/TSP patients and HTLV-1 asymptomatic carriers.** Iran J Basic Med Sci. 2021;24(7):992-6.
- 42- Ghobadi MZ, Izadi S, Teymoori-Rad M, Farahmand M, **Mozhgani SH**, Labbaf N, et al. **Potential role of viral infection and B cells as a linker between innate and adaptive immune response in systemic lupus erythematosus.** Immunol Res. 2021;69(2):196-204.
- 41- Ghobadi MZ, Emamzadeh R, **Mozhgani SH**. **Deciphering microRNA-mRNA regulatory network in adult T-cell leukemia/lymphoma; the battle between oncogenes and anti-oncogenes.** PLoS One. 2021;16(2):e0247713.
- 40- Chenari M, Forghani-Ramandi MM, Taherzadeh-Ghafarokhi N, Mokhtari-Azad T, Shadabi S, **Mozhgani SH**, et al. **Pyrexia in human herpesvirus 6 (HHV6)-infected patients: A systems virology study.** Gene Reports. 2021;23.
- 39- Aghajanian S, Teymoori-Rad M, Molaverdi G, **Mozhgani SH**. **Immunopathogenesis and Cellular Interactions in Human T-Cell Leukemia Virus Type 1 Associated Myelopathy/Tropical Spastic Paraparesis.** Front Microbiol. 2020;11:614940.
- 38- **Mozhgani SH**, Kermani HA, Norouzi M, Arabi M, Soltani S. **Nanotechnology based strategies for HIV-1 and HTLV-1 retroviruses gene detection.** Heliyon. 2020;6(5):e04048.

- 37- Mohamadi M, Azarbayjani K, **Mozhgani SH**, Bamdad T, Alamdary A, Nikoo HR, et al. **Hepatitis C virus alternative reading frame protein (ARFP): Production, features, and pathogenesis**. Journal of medical virology. 2020.
- 36- Zarei Ghobadi M, **Mozhgani SH**, Farzanehpour M, Behzadian F. **Identifying novel biomarkers of the pediatric influenza infection by weighted co-expression network analysis**. Virology journal. 2019;16(1):124.
- 35- Sabahi M, Salehipour A, Kazemi A, Sadeghi M, Decaro N, **Mozhgani SH**, et al. **Prevalence and disease association of human parvovirus B19 in Iran: a systematic review**. Future virology. 2019;14(8):561-70.
- 34- **Mozhgani SH**, Piran M, Zarei-Ghobadi M, Jafari M, Jazayeri SM, Mokhtari-Azad T, et al. **An insight to HTLV-1-associated myelopathy/tropical spastic paraparesis (HAM/TSP) pathogenesis; evidence from high-throughput data integration and meta-analysis**. Retrovirology. 2019;16(1):46.
- 33- Farzanehpour M, **Mozhgani SH**, Jalilvand S, Faghihloo E, Akhavan S, Salimi V, et al. **Serum and tissue miRNAs: potential biomarkers for the diagnosis of cervical cancer**. Virology journal. 2019;16(1):116.
- 32- Mozhgani SH, Zarei Ghobadi M, Behnam Rad M, Farzanehpour M, Behzadian F. **Reconnaissance of the candidate genes involved in the pathogenesis of human immunodeficiency virus and targeted by antiretroviral therapy**. Journal of medical virology. 2019;91(12):2134-41.
- 31- Sadeghi Y, Salami SA, Kananizadeh P, **Mozhgani SH**, Pourmand MR. **Real-time PCR followed by high-resolution melting analysis - a new robust approach to evaluate SCCmec typing of methicillin-resistant Staphylococcus aureus**. Future microbiology. 2019;14:155-64.
- 30- Teymoori-Rad M, **Mozhgani SH**, Zarei-Ghobadi M, Sahraian MA, Nejati A, Amiri MM, et al. **Integrational analysis of miRNAs data sets as a plausible missing linker between Epstein-Barr virus and vitamin D in relapsing remitting MS patients**. Gene. 2019;689:1-10.
- 29- Ghobadi MZ, **Mozhgani SH**, Hakimian F, Norouzi M, Rezaee SA, Ghourchian H. **Long segment detection of HTLV-1 genome based on the fluorescence quenching technique**. Heliyon. 2018;4(12):e00996.
- 28- Zarei-Ghobadi M, **Mozhgani SH**, Dashtestani F, Yadegari A, Hakimian F, Norouzi M, et al. **A genosensor for detection of HTLV-I based on photoluminescence quenching of fluorescent carbon dots in presence of iron magnetic nanoparticle-capped Au**. Scientific reports. 2018;8(1):15593.
- 27- **Mozhgani SH**, Jahantigh HR, Rafatpanah H, Valizadeh N, Mohammadi A, Basharkhah S, et al. **Interferon Lambda Family along with HTLV-1 Proviral Load, Tax, and HBZ Implicated in the Pathogenesis of Myelopathy/Tropical Spastic Paraparesis**. Neuro-degenerative diseases. 2018;18(2-3):150-5.

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- 25- **Mozhgani SH**, Malekpour SA, Norouzi M, Ramezani F, Rezaee SA, Poortahmasebi V, et al. **Molecular evolution and phylodynamics of hepatitis B virus infection circulating in Iran**. Archives of virology. 2018. (Epub ahead of print)
- 24- **Mozhgani SH**, Zarei Ghobadi M, Moeini S, Pakzad R, Kananizadeh P, Behzadian F. **Prevalence of human influenza virus in Iran: Evidence from a systematic review and meta-analysis**. Microbial pathogenesis. 2017; 115:168-74.
- 23- **Mozhgani SH**, Zarei-Ghobadi M, Teymoori-Rad M, Mokhtari-Azad T, Mirzaie M, Sheikhi M, et al. **Human T-lymphotropic virus 1 (HTLV-1) pathogenesis: A systems virology study**. Journal of cellular biochemistry. 2017. (Epub ahead of print)
- 22- **Mozhgani SH**, Ebrahimian SA, Gudarzi H, Jazayeri SM, Jahanbakhsh F, Mohraz M, et al. **CRF35-AD as the Main Circulating Genotype of Human Immunodeficiency Virus Type 1 Infection in Iran: A Phylogenetic and Demographic-Based Study**. Intervirology. 2017. (Epub ahead of print)
- 21- Poortahmasebi V, Poorebrahim M, Ghaziasadi A, Abazari MF, **Mozhgani SH**, Aleagha MN, et al. **Analysis of Antigenic and Conformational Changes in Hepatitis B Surface Antigen (HBsAg) Identified in Iranian Patients with Chronic Hepatitis B**. Hepatitis Monthly. 2017. (Epub ahead of print)
- 20- Norouzi M, Zarei Ghobadi M, Golmimi M, **Mozhgani SH**, Ghourchian H, Rezaee SA. **Quantum Dot-based Biosensor for the Detection of Human T-lymphotropic Virus-1**. Analytical Letters. 2017; 50(15):2402-11.
- 19- Babakhani F, Mokhtari Azad T, Kondori N, Jalilvand S, **Mozhgani SH**, Ghavami N, Farzanehpour M, Babaei F. **Detection of human papillomavirus genotypes and their association with p53 codon 72 polymorphism in prostate cancer**. Future Virology (Epub ahead of print).
- 18- Abedi F, **Mozhgani SH**, Rahimzadegan M, Gudarzi N, Valizadeh N, Rezaee SAR. **Prevalence and phylogenic study of HTLV-1 in patients with thalassemia in the Northeast of Iran**. Future Virology (Epub ahead of print).
- 17- **Mozhgani SH**, Jafarian M, Patrad E, Vaziri H, Rezaee SA, Akbarin MM, et al. **Evaluation of INOS, ICAM-1, and VCAM-1 gene expression: A study of adult T cell leukemia malignancy associated with HTLV-1**. Archives of virology. 2017; 162(4):1009-15.
- 16- **Mozhgani SH**, Azimzadeh Jamalkandi S, Gholami Pourbadie H, Mirzaie M, Noorbakhsh F, Vaziri B, et al. **Systems Biomedicine of Rabies Delineates the Affected Signaling Pathways**. Frontiers in microbiology. 2016; 7:1688.

- 15- **Mozhgani SH**, Jaberi N, Rezaee SA, Bustani R, Jazayeri SM, Akbarin MM, et al. **Evaluation of HTLV-1 HBZ and proviral load, together with host IFN lambda3, in pathogenesis of HAM/TSP**. Journal of medical virology. 2016.
- 14- Rafatpanah H, Torkamani M, Valizadeh N, Vakili R, Meshkani B, Khademi H, Gerayli S, **Mozhgani SH**, Rezaee SA. **Prevalence and phylogenetic analysis of HTLV-1 in a segregated population in Iran**. Journal of medical virology. 2016; 88(7):1247-53.
- 13- Ajorloo M, Borhani K, Bamdad T, **Mozhgani SHR**, Ghaderi M, Gholami A. **A Comparative approach between Heterologous Prime-Boost vaccination strategy and DNA vaccinations for Rabies**. Archives of Iranian Medicine. 2015; 18(4): 223-7.
- 12- Ajorloo M, Hashempour T, Bamdad T, Alborzi AM, **Mozhgani SHR**, Asadi R, Haj-sheykholeslami A, Merat SH. **Detection of specific antibodies to HCV-ARF/CORE+1 protein in cirrhotic and non-cirrhotic patients with hepatitis C: A Possible Association with Progressive Fibrosis**. Archives of Iranian Medicine. 2015; 18(5):304-7 .
- 11- Mostaan S, Ajorloo M, Khanahmad H, Ahangari Cohan R, Rikhtegaran Tehrani Z, Rezaei M, Fazeli F, Behdani M, Karimi Zare S, Karimi Z, **Mozhgani SHR**, Moukhah R. **A novel combined method for cost-benefit production of DNA ladders**. Advanced Biomedical Research. 2015; 4:15: 1-4.
- 10- Soltanian B, Irani S, Hashemi S, **Mozhgani SHR**, Ajorloo M, Cheraghi Y, et al. **Mycoplasma contamination in cell cultures treated with ciprofloxacin and enrofloxacin: brief report**. Tehran University Medical Journal TUMS Publications. 2015; 72(11):794-8. (Text in Persian).
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- 8- Gholami Arjenak V, **Mozhgani SHR**, Miandeh N, Janani AR, Ajorloo M, Atyabi SM, et al. **Production of rabies fluorescent antibody conjugated and determination of its function**. Research in Medicine. 2013; 36(4):167-72. (Text in Persian).
- 7- **Mozhgani SHR\***, Faghihloo E, Makvandi M, Samarbaf-Zadeh AR, Zareh-Khoshchreh R, Ajorloo M, Mousavi-Nasab SD, Borhani K. **Phylogenetic analysis of human astrovirus infection among children suffering from gastroenteritis referred to Aboozar hospital, Ahvaz, Iran**. Iranian Journal of Virology 2012; 6(3): 32-35.
- 6- **Mozhgani SHR**, Samarbaf-Zadeh AR, Makvandi M, Kalvandi GR, Shamsi-Zadeh A, Jalilian S, et al. **Astrovirus and Rotavirus Co-Infections in Children With Gastroenteritis Who Were Referred to Ahvaz Aboozar Hospital, Southern Iran**. Jundishapur Journal of Microbiology. 2012; 5(1): 352-4.

- 5- Jalilian S, Samarbaf-Zadeh AR, **Mozhgani SHR**, Makvandi M, Parsa-nahad M, Pirmoradi R, et al. **Relative Frequency of Norovirus Infection in Children Suffering From Gastroenteritis and Referred to Aboozar Hospital, Ahvaz, Iran.** Jundishapur Journal of Microbiology. 2012; 5(1): 355-8.
- 4- Parsa-Nahad M, Samarbaf-Zadeh AR, Makvandi M, **Mozhgani SHR**, Jalilian S, Pirmoradi R, et al. **Relative Frequency of Sapovirus Among Children Under 5 Years of Age With Acute Gastroenteritis at the Aboozar Hospital, Ahvaz, Iran.** Jundishapur Journal of Microbiology .2012; 5(1): 359-61.
- 3- Borhani K, Bamdad T, Ajourloo M, **Mozhgani SHR**, Miandehi N, Moradi-Joshaghan A, et al. **Cloning and Expression of Rabies Virus Glycoprotein Gene into Eukaryotic System.** Iranian Journal of Virology. 2012; 6(2): 8-11.
- 2- Parsa-Nahad M, Samarbaf-Zadeh AR, Makvandi M, Jalilian Sh, Kalvandi Gh, Sheikholeslami F, Pirmoradi R, Ajourloo M, **Mozhgani SHR\***. **Determination of Rotavirus, Sapovirus and Norovirus Co-Infection among Children Suffering from Gastroenteritis Referred to Ahvaz Abuzar Hospital, Southern Iran.** Iranian Journal of Virology. 2011; 5(4): 29-31.
- 1- **Mozhgani SHR**, Samarbaf-Zadeh AR, Makvandi M, Shamsi-Zadeh A, Parsanahad M, Jalilian S. **Relative frequency of astrovirus in children suffering from gastroenteritis referred to Aboozar hospital, Ahvaz.** Jundishapur Journal of Microbiology. 2011; 4(Supplement 1): S67-S70.

### **Books:**

- 5- **HTLV-1 and Associated Disease**
- 4- **Coronaviruses**
- 3- **COVID-19 Disease- Health Aspects**
- 2- **Diabets and Viruses**
- 1- **Viral vaccines**

### **Congress-Conference Contributions**

- 8- **All HTLV-1 sequences belonged to the Transcontinental (A) subgroup in the Cosmopolitan (a) subtype:Results of phylogenic analysis in the Northeast of Iran.** (6th Iranian Congress of Virology;Tehran University of Medical Sciences; Tehran- 10-11 May 2017).



- 7- **Phylogenetic analysis of human Astrovirus infection among children suffering from gastroenteritis referred to Aboozar hospital, Ahvaz, Iran.** (4th congress on novel and innovative laboratory technologies; Razi International Conference Hall; Tehran- 26-28 October 2016).
- 6- **Quantum dot based biosensor for detection of viruses.** (4th congress on novel and innovative laboratory technologies; Razi International Conference Hall; Tehran- 26-28 October 2016).
- 5- **Production of Rabies fluorescent conjugated Antibody by immunization of Rabbit with animal Rabies vaccine.** (6th Iranian Congress of Virology; Tarbiat Modare University; Tehran - 17- 19 October 2012).
- 4- **Evaluation of antibody titers against hepatitis B in hospital staff in Izeh, Khuzestan.** (6th Iranian Congress of Virology; Tarbiat Modare University; Tehran - 17- 19 October 2012).
- 3- **Overview of infantile viral gastroenteritis in Ahvaz, Iran.** (6th Iranian Congress of Virology; Tarbiat Modare University; Tehran 17- 19 October 2012).
- 2- **Evaluation of minimal required virus titer to induce an acceptable immunity by BHK-Rabies vaccine produced in Pasture Institute of Iran.** (5th Iranian Congress of Microbiology, 8-10 November 2011, Shiraz, Iran).
- 1- **Human immunodeficiency virus (HIV) and hepatitis B (HBV) infection among pregnant women in Izeh, Khuzestan.** (4th Congress of Microbiology, 9-11 November 2010, Isfahan, Iran).