Curriculum Vitae
May 2025

Hossein Khorramdelazad, (Ph.D.)

1. Personal details:

- Date and place of birth: 01/09/1981, Rafsanjan, Iran
- E-mail address: Khorramdelazad@gmail.com
- Academic E-mail: h.khoramdel@rums.ac.ir

2. Education:

- **Ph.D. in Immunology**

  - 2019-2023 (Holder of the first rank in the Ph.D. program entrance examination in Iran, 2019)
  - Department of Immunology, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.
  - G.P.A: 19.32/20
  - Thesis grade: 20/20 (Excellent grade A+)

- **Master of Science in Immunology**

  - 2013-2014
  - Department of Immunology, Faculty of Medicine, Rafsanjan University of Medical Sciences, Rafsanjan, Iran
  - G.P.A: 19.02/20
  - Thesis grade: 20/20 (Excellent grade A+)

- **Bachelor of Science in Medical Laboratory Science**

  - 2006-2008
  - Faculty of Medical Science, Kerman University, Iran
  - G.P.A: 14.96 /20

- **Associated degree in Medical Laboratory Science**

  - 2004-2006
  - Faculty of Medical Science, Rafsanjan University, Iran
  - G.P.A: 16.04/20

3. Employment history:

- 2017-present, Instructor/Assistant Professor of Immunology, Faculty Member, Rafsanjan University of Medical Sciences, Rafsanjan, Iran.
- 2008-2016, as a supervisor at the Molecular Medicine Research Center, Rafsanjan University of Medical Sciences, Rafsanjan, Iran

4. Current Position:

- Assistant Professor of Immunology, Faculty Member, Rafsanjan University of Medical Sciences, Rafsanjan, Iran.

5. Honors:

- Holder of the 1st Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2013
- Holder of the 2nd Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2014
- Holder of the 1st Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2015
- Holder of the 1st Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2016
- Holder of the first rank in the Ph.D. program entrance examination in Iran 2019
- Holder of the 1st Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2020
- Holder of the 1st Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2021
- Holder of the 2nd Rank Researcher. Rafsanjan University of Medical Sciences Festival Award 2023

6. Bibliography

A. Publications:

1. Najafi, A., et al., *Catalase application in cancer therapy: Simultaneous focusing on hypoxia attenuation and macrophage reprogramming*. Biomedicine & Pharmacotherapy, 2022. **153**: p. 113483.
2. Ranjbar, M., et al., *Role of CCL2/CCR2 axis in the pathogenesis of COVID-19 and possible Treatments: All options on the Table*. International Immunopharmacology, 2022. **113**: p. 109325.
3. Hashemi, S.F. and H. Khorramdelazad, *The cryptic role of CXCL17/CXCR8 axis in the pathogenesis of cancers: a review of the latest evidence*. Journal of Cell Communication and Signaling, 2022: p. 1-14.
4. Khorramdelazad, H., et al., *Type-I interferons in the immunopathogenesis and treatment of Coronavirus disease 2019*. European journal of pharmacology, 2022: p. 175051.
5. Masoumi, M., et al., *Role of T Cells in the Pathogenesis of Rheumatoid Arthritis: Focus on Immunometabolism Dysfunctions*. Inflammation, 2022: p. 1-15.

6. Ahmadifard, R., et al., *Interferon-γ-Treated Mesenchymal Stem Cells Modulate the T Cell-Related Chemokines and Chemokine Receptors in an Animal Model of Experimental Autoimmune Encephalomyelitis*. Drug Research, 2023.
7. Masoumi, M., et al., *Immunometabolism Dysfunction in the Pathophysiology and Treatment of Rheumatoid Arthritis*. Current Medicinal Chemistry, 2023.
8. Kazemi, M.H., et al., *Tumor-infiltrating lymphocytes for treatment of solid tumors: It takes two to tango?* Frontiers in Immunology, 2022. **13**.
9. Arababadi, M.K., et al., *Cytokine patterns after therapy with Avonex®, Rebif®, Betaferon® and CinnoVex™ in relapsing–remitting multiple sclerosis in Iranian patients*. Biomarkers in Medicine, 2010. **4**(5): p. 755-759.
10. Hassanshahi, G., et al., *Assessment of CXCL12 (SDF-1α) polymorphisms and its serum level in posttransfusion occult HBV-infected patients in Southeastern Iran*. Archives of medical research, 2010. **41**(5): p. 338-342.
11. Derakhshan, R., et al., *Increased circulating levels of SDF-1 (CXCL12) in type 2 diabetic patients are correlated to disease state but are unrelated to polymorphism of the SDF-1β gene in the Iranian population*. Inflammation, 2012. **35**(3): p. 900-904.
12. Aminzadeh, F., et al., *Differential Expression of CXC Chemokines CXCL 10 and CXCL 12 in Term and Pre-term Neonates and Their Mothers*. American Journal of Reproductive Immunology, 2012. **68**(4): p. 338-344.
13. Azin, H., et al., *The SDF-1 3′ A genetic variation of the chemokine SDF-1α (CXCL12) in parallel with its increased circulating levels is associated with susceptibility to MS: a study on Iranian multiple sclerosis patients*. Journal of Molecular Neuroscience, 2012. **47**(3): p. 431-436.
14. Khandany, B.K., et al., *Evaluation of circulating concentrations of CXCL1 (Gro-α), CXCL10 (IP-10) and CXCL12 (SDF-1) in ALL patients prior and post bone marrow transplantation*. PathologyResearch and Practice, 2012. **208**(10): p. 615-619.
15. Arababadi, M.K., et al., *Cytokines in preterm delivery*. Laboratory Medicine, 2012. **43**(4): p. 27-
30.
16. Sajadi, S., et al., *Plasma levels of CXCL1 (GRO-alpha) and CXCL10 (IP-10) are elevated in type 2 diabetic patients: evidence for the involvement of inflammation and angiogenesis/angiostasis in this disease state*. Clin Lab, 2013. **59**(1-2): p. 133-7.
17. Sajadi, S.M.A., et al., *Decreased expressions of toll-like receptor 9 and its Signaling molecules in chronic hepatitis B virus–infected patients*. Archives of Pathology and Laboratory Medicine, 2013. **137**(11): p. 1674-1679.
18. Jamali, Z., et al., *Expression of CC chemokines CCL2, CCL5, and CCL11 is associated with duration of disease and complications in type-1 diabetes: a study on Iranian diabetic patients*. Clin Lab, 2013. **59**(9-10): p. 993-1001.
19. Moosavi, S.R., et al., *The SDF-1 3'A Genetic Variation Is Correlated with Elevated Intra-tumor Tissue and Circulating Concentration of CXCL12 in Glial Tumors*. Journal of Molecular Neuroscience, 2013. **50**(2): p. 298-304.
20. Radman, M., et al., *Serum levels of the CC chemokines CCL2, CCL5, and CCL11 in food allergic children with different clinical manifestations*. Inflammation, 2013. **36**(3): p. 561-566.
21. Khorramdelazad, H., et al., *CCR5 Δ 32 mutation is not prevalent in Iranians with chronic HBV infection*. Journal of medical virology, 2013. **85**(6): p. 964-968.
22. Jafarzadeh, A., et al., *Ginger extracts influence the expression of IL-27 and IL-33 in the central nervous system in experimental autoimmune encephalomyelitis and*

ameliorates the clinical symptoms of disease. Journal of neuroimmunology, 2014. **276**(1-2): p. 80-88.
23. Zeinali, M., et al., *Role of galectin-3 in the pathogenesis of bladder transitional cell carcinoma*. Human immunology, 2015. **76**(10): p. 770-774.
24. Khorramdelazad, H., et al., *Lack of correlation between the CCR5-Δ32 mutation and acute myeloid leukemia in Iranian patients*. Indian Journal of Hematology and Blood Transfusion, 2015. **31**(1): p. 29-31.
25. Khorramdelazad, H., et al., *New insights into the role of stromal cell-derived factor 1 (SDF1/CXCL12) in the pathophysiology of multiple sclerosis*. Journal of neuroimmunology, 2016. **290**: p. 70-75.
26. Bagheri, V., et al., *CXC chemokine CXCL12 tissue expression and circulating levels in peptic ulcer patients with Helicobacter pylori infection*. Cytokine, 2016. **85**: p. 1-4.
27. Bagheri, V., et al., *Elevated levels of S100A12 in the seminal plasma of infertile men with varicocele*. International urology and nephrology, 2016. **48**(3): p. 343-347.
28. Vakilian, A., et al., *CCL2/CCR2 signaling pathway in glioblastoma multiforme*. Neurochemistry International, 2017. **103**: p. 1-7.
29. Ferdousie, V.T., et al., *Serum CXCL10 and CXCL12 chemokine levels are associated with the severity of coronary artery disease and coronary artery occlusion*. International Journal of Cardiology, 2017. **233**: p. 23-28.
30. Nazari, A., H. Khorramdelazad, and G. Hassanshahi, *Biological/pathological functions of the CXCL12/CXCR4/CXCR7 axes in the pathogenesis of bladder cancer*. International journal of clinical oncology, 2017. **22**(6): p. 991-1000.
31. Nemati, M., et al., *Toll-like receptor 2: An important immunomodulatory molecule during Helicobacter pylori infection*. Life sciences, 2017. **178**: p. 17-29.
32. Zeinali, M., et al., *Inflammatory and anti-inflammatory cytokines in the seminal plasma of infertile men suffering from varicocele*. Andrologia, 2017. **49**(6): p. e12685.
33. Karimabad, M.N., et al., *The novel Indole-3-formaldehyde (2-AITFEI-3-F) is involved in processes of apoptosis induction?* Life sciences, 2017. **181**: p. 31-44.
34. Fatehi, F., et al., *CC chemokines CCL2, CCL3, CCL4 and CCL5 are elevated in osteoporosis patients*. Journal of biomedical research, 2017. **31**(5): p. 468-470.
35. Nazari, A., et al., *S100A12 in renal and cardiovascular diseases*. Life sciences, 2017. **191**: p. 253258.
36. Behfar, S., et al., *A brief look at the role of monocyte chemoattractant protein-1 (CCL2) in the pathophysiology of psoriasis*. Cytokine, 2018. **110**: p. 226-231.
37. Nemati, M., et al., *Humoral and T cell–mediated immune response against trichomoniasis*. Parasite immunology, 2018. **40**(3): p. e12510.
38. Bagheri, V., et al., *CXCL12 and CXCR4 in the Peripheral Blood of Patients with Parkinson's Disease*. Neuroimmunomodulation, 2018. **25**(4): p. 201-205.
39. Taghavi, Y., et al., *Monocyte chemoattractant protein-1 (MCP-1/CCL2) in diabetic retinopathy:*
latest evidence and clinical considerations. Journal of cell communication and signaling, 2019. **13**(4): p. 451-462.
40. Jafarzadeh, A., et al., *Immunomodulatory properties of cimetidine: Its therapeutic potentials for treatment of immune-related diseases*. International immunopharmacology, 2019. **70**: p. 156166.
41. Jafarzadeh, A., et al., *Leishmania species-dependent functional duality of toll-like receptor 2*. IUBMB life, 2019. **71**(11): p. 1685-1700.

42. Vakilian, A., et al., *Expression analysis of beta-secretase 1 (BACE1) enzyme in peripheral blood of patients with Alzheimer's disease*. Caspian Journal of Internal Medicine, 2019. **10**(3): p. 276.
43. Masoumi, J., et al., *Role of Apelin/APJ axis in cancer development and progression*. Advances in Medical Sciences, 2020. **65**(1): p. 202-213.
44. Khorasani, M.M., et al., *Role (s) of cytokines in pulpitis: Latest evidence and therapeutic approaches*. Cytokine, 2020. **126**: p. 154896.
45. Karami, J., et al., *Role of autophagy in the pathogenesis of rheumatoid arthritis: Latest evidence and therapeutic approaches*. Life sciences, 2020. **254**: p. 117734.
46. Farnoosh, G., et al., *Are Iranian sulfur mustard gas-exposed survivors more vulnerable to SARSCoV-2? Some similarity in their pathogenesis*. Disaster medicine and public health preparedness, 2020. **14**(6): p. 826-832.
47. Nazari, A., et al., *Expression of vascular endothelial growth factor and its receptors in infertile men with varicocele*. Journal of Reproductive Immunology, 2020. **140**: p. 103131.
48. Moghadam-Ahmadi, A., et al., *Eotaxins and C–C chemokine receptor type 3 in Parkinson's disease*. Acta Neurologica Belgica, 2020. **120**(3): p. 589-594.
49. Abbasifard, M., et al., *Assessing the expression of immunosuppressive cytokines in the newly diagnosed systemic lupus Erythematosus patients: a focus on B cells*. Bmc Immunology, 2020. **21**(1): p. 1-12.
50. Abbasifard, M., et al., *The S100 proteins expression in newly diagnosed systemic lupus erythematosus patients: Can they be potential diagnostic biomarkers?* Gene Reports, 2020. **20**: p. 100773.
51. Mollahosseini, M., et al., *The association between traumatic brain injury and accelerated fracture healing: a study on the effects of growth factors and cytokines*. Journal of Molecular Neuroscience, 2021. **71**(1): p. 162-168.
52. Nazari, A., et al., *Effective Treatments for Bladder Cancer Affecting CXCL9/CXCL10/CXCL11/CXCR3 Axis: A Review*. Oman Medical Journal, 2020. **35**(2): p. e103.
53. Abbasifard, M. and H. Khorramdelazad, *The bio-mission of interleukin-6 in the pathogenesis of COVID-19: A brief look at potential therapeutic tactics*. Life sciences, 2020. **257**: p. 118097.
54. Jalalpour, S., et al., *Ginger extract modulates the production of chemokines ccl17, ccl20, ccl22, and cxcl10 and the gene expression of their receptors in peripheral blood mononuclear cells from peptic ulcer patients infected with helicobacter pylori*. Jundishapur Journal of Natural Pharmaceutical Products, 2021. **16**(3): p. 12.
55. Kazemi, M., et al., *Zingerone improves the immune responses in an animal model of breast cancer*. Journal of Complementary and Integrative Medicine, 2021. **18**(2): p. 303-310.
56. Taghipour, F., et al., *Modulatory Effects of Metformin Alone and in Combination with Cimetidine and Ibuprofen on T Cell-Related Parameters in a Breast Cancer Model*. Iranian Journal of Allergy, Asthma and Immunology, 2021. **20**(5): p. 600.
57. Yazdani, B., et al., *CXCL1, CXCL10 and CXCL12 Chemokines are Variously Expressed in Acute Myeloid Leukemia Patients Prior and Post Bone Marrow Transplantation*. Asian Pacific Journal of Cancer Prevention: APJCP, 2021. **22**(10): p. 3377.
58. Abassifard, M., et al., *Higher Circulating Concentration of Interleukin-38 in Patients with Knee Osteoarthritis: Its Association with Disease Severity*. Iranian Journal of Allergy, Asthma and Immunology, 2021. **20**(1): p. 114.

59. Masoumi, M., et al., *Destructive roles of fibroblast-like synoviocytes in chronic inflammation and joint damage in rheumatoid arthritis*. Inflammation, 2021. **44**(2): p. 466-479.
60. Barzaman, K., et al., *Breast cancer immunotherapy: Current and novel approaches*. International Immunopharmacology, 2021. **98**: p. 107886.
61. Moadab, F., H. Khorramdelazad, and M. Abbasifard, *Role of CCL2/CCR2 axis in the immunopathogenesis of rheumatoid arthritis: Latest evidence and therapeutic approaches*. Life Sciences, 2021. **269**: p. 119034.
62. Khorramdelazad, H., et al., *Immunopathological similarities between COVID-19 and influenza: Investigating the consequences of Co-infection*. Microbial pathogenesis, 2021. **152**: p. 104554.
63. Assar, S., et al., *T helper and B cell escape mutations within the HBc gene in patients with asymptomatic HBV infection: a study from the South-Eastern region of Iran*. Clinical laboratory, 2012. **58**(1): p. 53.
64. Khorramdelazad, H., et al., *High serum levels of TGF-β in Iranians with chronic HBV infection*. Hepatitis monthly, 2012. **12**(11).
65. Ayoobi, F., et al., *Reduced expression of TRIF in chronic HBV infected Iranian patients*. Clinics and research in hepatology and gastroenterology, 2013. **37**(5): p. 491-495.
66. Zainodini, N., et al., *Differential expression of CXCL1, CXCL9 CXCL10 and CXCL12 chemokines in alopecia areata*. Iranian Journal of Immunology, 2013. **10**(1): p. 40-46.
67. Abdollahi, S.H., et al., *Interleukin-10 serum levels after vaccination with in vivo prepared Toxoplasma gondii excreted/secreted antigens*. Oman medical journal, 2013. **28**(2): p. 112.
68. Hakimizadeh, E., et al., *Increased circulating levels of CXC chemokines is correlated with duration and complications of the disease in type-1 diabetes: a study on Iranian diabetic patients*. Clin Lab, 2013. **59**(5-6): p. 531-7.
69. Rafatpanah, H., et al., *The SDF-1α3' A Genetic Variation Is Correlated with Susceptibility of Asthma in Iranian Patients*. BioMed research international, 2013. **2013**.
70. Sharifabadi, A.R., et al., *All eotaxins CCL11, CCL24 and CCL26 are increased but to various extents in pulmonary tuberculosis patients*. Clinical laboratory, 2014. **60**(1): p. 93-97.
71. Ostadebrahimi, H., et al., *CXC chemokines CXCL1, CXCL9, CXCL10 and CXCL12 are variably expressed in patients with sickle cell disease and carriers: are they predictive tools for disease complications*. Clin Lab, 2014. **60**(1): p. 99-104.
72. Khorramdelazad, H., G. Hassanshahi, and M.K. Arababadi, *Controversial issues regarding the roles of IL-10 and IFN-γ in active/inactive chronic hepatitis B*. World journal of gastrointestinal pathophysiology, 2014. **5**(2): p. 120.
73. Hakimi, H., et al., *Seminal levels of pro-inflammatory (CXCL1, CXCL9, CXCL10) and homeostatic (CXCL12) chemokines in men with asymptomatic chlamydia trachomatis infection*. Jundishapur journal of microbiology, 2014. **7**(12).
74. Khorramdelazad, H., et al., *S100A12 and RAGE expression in human bladder transitional cell carcinoma: a role for the ligand/RAGE axis in tumor progression?* Asian Pacific journal of cancer prevention: APJCP, 2015. **16**(7): p. 2725-9.
75. Abdollahi, S.H., et al., *Levels of Transforming Growth Factor-Beta After Immunization of Mice With in vivo prepared Toxoplasma gondii Excretory/Secretory Proteins*. Jundishapur journal of microbiology, 2015. **8**(5).

76. Mobini, M., et al., *Association of cord blood levels of IL-17A, but not TGF-β with pre-term neonate*. Iranian journal of reproductive medicine, 2015. **13**(6): p. 345.
77. Fathalizadeh, J., et al., *Induction of apoptosis by pistachio (Pistacia vera L.) hull extract and its molecular mechanisms of action in human hepatoma cell line HepG2*. Cell. Mol. Biol, 2015. **61**(7): p. 128-134.
78. Moogooei, M., et al., *The intricate expression of CC chemokines in glial tumors: evidence for involvement of CCL2 and CCL5 but not CCL11*. Acta Medica Iranica, 2015: p. 770-777.
79. Ahmadi, Z., et al., *An overlook to the characteristics and roles played by eotaxin network in the pathophysiology of food allergies: allergic asthma and atopic dermatitis*. Inflammation, 2016. **39**(3): p. 1253-1267.
80. Karimabad, M.N., et al., *Evaluating of OCT-4 and NANOG was differentially regulated by a new derivative indole in leukemia cell line*. Immunology letters, 2017. **190**: p. 7-14.
81. Khorramdelazad, M., et al., *Transcriptome profiling of lentil (Lens culinaris) through the first 24 hours of Ascochyta lentis infection reveals key defence response genes*. BMC genomics, 2018. **19**(1): p. 108.
82. Ahangar-Parvin, R., et al., *The Modulatory Effects of Vitamin D on the Expression of IL-12 and TGF-β in the Spinal Cord and Serum of Mice with Experimental Autoimmune Encephalomyelitis*. Iranian journal of pathology, 2018. **13**(1): p. 10.
83. Moghadam-Ahmadi, A., et al., *Eotaxins and C–C chemokine receptor type 3 in Parkinson's disease*. Acta Neurologica Belgica, 2018: p. 1-6.
84. Sheikhrezaei, Z., et al., *A new indole derivative decreased SALL4 gene expression in acute promyelocytic leukemia cell line (NB4)*. Iranian biomedical journal, 2018. **22**(2): p. 99.
85. Taghavi, Y., et al., *Monocyte chemoattractant protein-1 (MCP-1/CCL2) in diabetic retinopathy:*
latest evidence and clinical considerations. Journal of cell communication and signaling, 2019: p. 1-12.
86. Noroozi, M.K., et al., *Indole itself and its novel derivative affect PML cells proliferation via controlling the expression of cell cycle genes*. Cellular and molecular biology (Noisy-le-Grand, France), 2019. **65**(3): p. 41-47.
87. Yaghini, N., et al., *Serum levels of interleukin 10 (IL-10) in patients with type 2 diabetes*. Iranian Red Crescent Medical Journal, 2011. **13**(10): p. 752-753.
88. Ahmadabadi, B.N., et al., *Downregulation of CCR5 expression on the peripheral blood CD8+ T cells of southeastern Iranian patients with chronic hepatitis B infection*. Inflammation, 2013. **36**(1): p. 136-140.
89. Asadikaram, G., et al., *Interferon-β 1a Modulates Expression of RAGE but Not S100A12 and Nuclear Factor-κB in Multiple Sclerosis Patients*. Neuroimmunomodulation, 2016. **23**(5-6): p. 345-351.
90. Khorramdelazad, H., et al., *Role of S100A12/RAGE axis in eccentric exercise-induced delayedonset muscle soreness in male non-athletes*. Sport Sciences for Health, 2015. **11**(3): p. 345-349.
91. Nazari, A., G. Hassanshahi, and H. Khorramdelazad, *Elevated levels of epithelial neutrophil activating peptide-78 (ENA-78)(CXCL5) and Interleukin-1β is correlated with varicocele-caused infertility: A novel finding*. Middle East Fertility Society Journal, 2017. **22**(4): p. 333-335.
92. Karimabad, M.N., H. Khoramdelazad, and G. Hassanshahi, *Genetic variation, biological structure, sources, and fundamental parts played by CXCL12 in pathophysiology of*

type 1 diabetes mellitus. International Journal of Diabetes in Developing Countries, 2017. **37**(3): p. 229-239.
93. Jafarzadeh, A., et al., *Ginger Extract Reduces the Expression of IL-17 and IL-23 in the Seraand Central Nervous System of EAEMice*. Iranian Journal of Immunology, 2015. **12**(4): p. 288-301.
94. Nazari, A., et al., *Plasma CXCL16 Level is Associated With Cardiovascular Disease in Iranian Hemodialysis Patients*. Biomedical and Pharmacology Journal, 2017. **10**(1): p. 01-07.
95. Jafarzadeh, A., et al., *Lower circulating levels of chemokine CXCL10 in Helicobacter pyloriinfected patients with peptic ulcer: Influence of the bacterial virulence factor CagA*. Iranian journal of microbiology, 2013. **5**(1): p. 28.
96. Khorasani, M.M., et al., *Association of S100 calcium-binding protein A12, receptor for advanced glycation endproducts, and nuclear factor-κB expression with inflammation in pulp tissues from tooth caries*. Journal of investigative and clinical dentistry, 2018. **9**(1): p. e12290.
97. Jafarzadeh, A., et al., *The Toll-like Receptor 2 (TLR2)-related Immunopathological Responses in the Multiple Sclerosis and Experimental Autoimmune Encephalomyelitis*. Iranian Journal of Allergy, Asthma and Immunology, 2019.
98. Jafarzadeh, A., et al., *Leishmania species-dependent functional duality of toll-like receptor 2*. IUBMB life, 2019.
99. Nazari, A., et al., *Expression of Vascular Endothelial Growth Factor and its Receptors in Infertile Men with Varicocele*. Journal of Reproductive Immunology, 2020: p. 103131.
100. Karami, J., et al., *Role of autophagy in the pathogenesis of rheumatoid arthritis: Latest evidence and therapeutic approaches*. Life Sciences, 2020: p. 117734.
101. Farnoosh, G., et al., *Are Iranian sulfur mustard-exposed survivors more vulnerable to SARS-CoV-2: some similarity in their pathogenesis*. Disaster medicine and public health preparedness, 2020: p. 1-12.
102. Radman, M., et al., *Long-term impacts of tonsillectomy on children's immune functions*. Journal of Family Medicine and Primary Care, 2020. **9**(3): p. 1483.
103. Mollahosseini, M., et al., *The Association Between Traumatic Brain Injury and Accelerated Fracture Healing: A Study on the Effects of Growth Factors and Cytokines*. Journal of Molecular Neuroscience, 2020: p. 1-7.
104. Abbasifard, M. and H. Khorramdelazad, *The bio-mission of interleukin-6 in the pathogenesis of COVID-19: A brief look at potential therapeutic tactics*. Life Sciences, 2020: p. 118097.
105. Fard, M.A., et al., *The S100 protein expression in newly diagnosed systemic lupus erythematosus patients: Can they be potential diagnostic biomarkers?* Gene Reports, 2020: p. 100773.
106. Mazraesefidi, M., et al., *Evaluation Effects of Quercetin on Streptozotocin-treated RINm5F Pancreatic β-cells in vitro*. Current Chemical Biology, 2021. **15**(4): p. 310-318.
107. Hassanshahi, G., et al., *Serum levels of CC chemokine ligands in cutaneous leishmaniasis patients*. Journal of Parasitic Diseases, 2021. **45**(1): p. 153-158.

2023-2025 Published Articles

1. Razizadeh MH, Zafarani A, Taghavi-Farahabadi M, Khorramdelazad H, Minaeian S, Mahmoudi M. Natural killer cells and their exosomes in viral infections and related therapeutic approaches: where are we? Cell Communication and Signaling. 2023;21(1):261.
2. Aghamohamadi N, Shahba F, Mehrabadi AZ, Khorramdelazad H, Karimi M, Falak R, et al. Agedependent immune responses in COVID-19-mediated liver injury: focus on cytokines. Frontiers in Endocrinology. 2023;14.
3. Mehrabadi AZ, Shahba F, Khorramdelazad H, Aghamohammadi N, Karimi M, Bagherzadeh K, et al. Interleukin-1 receptor accessory protein (IL-1RAP): A magic bullet candidate for immunotherapy of human malignancies. Critical Reviews in Oncology/Hematology. 2024;193:104200.
4. Sadri M, Najafi A, Rahimi A, Behranvand N, Kazemi MH, Khorramdelazad H, et al. Hypoxia effects on oncolytic virotherapy in Cancer: Friend or Foe? International Immunopharmacology. 2023;122:110470.
5. Shafaghat Z, Ghomi A-HK, Khorramdelazad H, Safari E. Purinergic signaling: decoding its role in COVID-19 pathogenesis and promising treatment strategies. Inflammopharmacology. 2023;31(6):300520.
6. Kamiab Z, Khorramdelazad H, Kafi M, Jafarzadeh A, Mohammadi-Shahrokhi V, Bagheri Hosseinabadi Z, et al. Role of Interleukin-17 family cytokines in disease severity of patients with knee osteoarthritis. Advances in Rheumatology. 2024;64(1):11.
7. Abbasifard M, Fakhrabadi AH, Bahremand F, Khorramdelazad H. Evaluation of the interaction between tumor growth factor-β and interferon type I pathways in patients with COVID-19: focusing on ages 1 to 90 years. BMC Infectious Diseases. 2023;23(1):248.
8. Khorramdelazad H, Bagherzadeh K, Rahimi A, Safari E, Hassanshahi G, Khoshmirsafa M, et al. Antitumor activities of a novel fluorinated small molecule (A1) in CT26 colorectal cancer cells: molecular docking and in vitro studies. Journal of Biomolecular Structure and Dynamics. 2023:1-14.
9. Masoumi J, Zainodini N, Basirjafar P, Tavakoli T, Zandvakili R, Nemati M, et al. Apelin receptor antagonist boosts dendritic cell vaccine efficacy in controlling angiogenic, metastatic and apoptoticrelated factors in 4T1 breast tumor-bearing mice. Medical Oncology. 2023;40(6):179.
10. Basirjafar P, Zandvakili R, Masoumi J, Zainodini N, Taghipour Z, Khorramdelazad H, et al. Leptin/lipopolysaccharide-treated dendritic cell vaccine improved cellular immune responses in an animal model of breast cancer. Immunopharmacology and Immunotoxicology. 2023:1-13.
11. Zandvakili R, Basirjafar P, Masoumi J, Zainodini N, Taghipour Z, Khorramdelazad H, et al. Vaccination with celecoxib-treated dendritic cells improved cellular immune responses in an animal breast cancer model. Advances in Medical Sciences. 2023;68(1):157-68.
12. Ahmadifard R, Jafarzadeh A, Mahmoodi M, Nemati M, Rahmani M, Khorramdelazad H, et al. Interferon-γ-Treated Mesenchymal Stem Cells Modulate the T Cell-Related

Chemokines and Chemokine Receptors in an Animal Model of Experimental Autoimmune Encephalomyelitis. Drug Research. 2023;73(04):213-23.

13. Rezagholizadeh F, Tajik F, Talebi M, Taha SR, Zadeh MS, Farhangnia P, et al. Unraveling the potential of CD8, CD68, and VISTA as diagnostic and prognostic markers in patients with pancreatic ductal adenocarcinoma. 2024.
14. Hazrati A, Malekpour K, Khorramdelazad H, Rajaei S, Hashemi SM. Therapeutic and immunomodulatory potentials of mesenchymal stromal/stem cells and immune checkpoints related molecules. Biomarker Research. 2024 Mar 21;12(1):35.
15. Moadab A, Valizadeh MR, Nazari A, Khorramdelazad H. Association of interleukin-17A and chemokine/vascular endothelial growth factor-induced angiogenesis in newly diagnosed patients with bladder cancer. BMC immunology. 2024 Mar 21;25(1):20.
16. Khorramdelazad H, Bagherzadeh K, Rahimi A, Darehkordi A, Najafi A, Karimi M, Khoshmirsafa M, Hassanshahi G, Safari E, Falak R. A1, an innovative fluorinated CXCR4 inhibitor, redefines the therapeutic landscape in colorectal cancer. Cancer Cell International. 2025 Jan 5;25(1):5.
17. Rahimi A, Baghernejadan Z, Hazrati A, Malekpour K, Samimi LN, Najafi A, Falak R, Khorramdelazad H. Combination therapy with immune checkpoint inhibitors in colorectal cancer: Challenges, resistance mechanisms, and the role of microbiota. Biomedicine & Pharmacotherapy. 2025 May 1;186:118014.
18. Yaraghi P, Kheyri A, Mikaeili N, Boroumand A, Abbasifard M, Farhangnia P, Rezagholizadeh F, Khorramdelazad H. Nanoparticle-mediated enhancement of DNA Vaccines: Revolutionizing immunization strategies. International Journal of Biological Macromolecules. 2025 Apr 1;302:140558.
19. Moadab A, Khorramdelazad H, Javar MT, Nejad MS, Mirzaie S, Hatami S, Mahdavi N, Ghaffari S, Yazdian FA. Unmasking a Paradox: Roles of the PD-1/PD-L1 Axis in Alzheimer's Disease-Associated Neuroinflammation. Journal of Neuroimmune Pharmacology. 2025 Apr 26;20(1):46.
20. Abedinzadeh M, Nazari A, Vahidi SA, Pourmasumi S, Khorramdelazad H. Critical Roles of VEGFR1, VEGFR2, VEGFR3, BAX, and BCL-2 in the Pathogenesis of Varicose Veins: Unveiling Molecular Mechanisms. American Journal of Men's Health. 2025 Mar;19(2):15579883251321588.
21. Farhangnia P, Khorramdelazad H, Nickho H, Delbandi AA. Current and future immunotherapeutic approaches in pancreatic cancer treatment. Journal of Hematology & Oncology. 2024 Jun 4;17(1):40.
22. Jafarzadeh, A., et al., *A reappraisal of the contribution of Th9 cells and interleukin-9 to the pathogenesis of rheumatoid arthritis*. Human Immunology, 2025. **86**(4): p. 111343.
23. Khorramdelazad, H., et al., *Fighting cancer smarter: Using hydrogel delivery systems to target chemokines*. Biomedicine & Pharmacotherapy, 2025. **192**: p. 118601.
24. Mohammadi, Y., et al., *The Critical Role of Homing in TIL Therapy Success: From Biology to Clinical Application*. Critical Reviews in Oncology/Hematology, 2025: p. 104930.

25. Rismanchi, H., et al., *The role of curcumin in modulating circular RNAs and long non-coding RNAs in cancer*. Clinical and Translational Oncology, 2025. **27**(6): p. 2416-2436.

26. Abbasifard, M., V. Mohammadi-Shahrokhi, and H. Khorramdelazad, *Stromal-derived factor-1: The glycoprotein fueling autoimmune storms via CXCR4 and CXCR7*. International Journal of Biological Macromolecules, 2025: p. 146374.

27. Rezagholizadeh, F., et al., *Transcriptomic analysis of laser-capture microdissected tumors reveals RAD51AP1 as a tumor-specific marker associated progression from pancreatic intraepithelial neoplasia to invasive pancreatic cancer*. Cancer Cell International, 2025. **25**(1): p. 208.

28. Afshari, A., H. Khorramdelazad, and M. Abbasifard, *Toward immune tolerance in rheumatoid arthritis: Emerging immunotherapies and targets for long-term remission*. International Immunopharmacology, 2025. **162**: p. 115162.

29. Naseri, B., et al., Ambivalent roles of miRNAs in cancer development via modulating tumor-associated innate immune cells. BioImpacts, 2025. **15**(1): p. 31430-31430.

30. Rahimi, A., et al., *Exploring the Therapeutic Potential of Fluorinated CXCR4 Inhibitor A1: Insights from Breast Cancer In Vitro Investigations*. Iranian Journal of Allergy, Asthma and Immunology, 2025: p. 1-11.

B. Published Books:

- Assessment of gene expression by Real-time PCR (Syber green) technique (2017, In Persian)
- Immunopathogenesis of Multiple Sclerosis disease (2018, In Persian)
- Unleashing the Potential of Natural Killer Cells in Immunotherapy for Glioblastoma and Brain Tumors (Springer, 2023)

C. Project in progress:

- Evaluation of the inhibitory effect of a novel synthetic small molecule CXCR4 antagonist on proliferation and migration of colorectal tumor cells (CT-26) and immune responses in vitro and in vivo
- Evaluation of the interaction Between Tumor Growth Factor-β and Interferon Type I Pathways in Patients with COVID-19: Focusing on ages 1 to 90 years
- Role of CCL2/CCR2 axis in the pathogenesis of COVID-19

7. Professional Participations:

- Khorramdelazad H, “Lack of association between CCR5-Δ32 mutation and acute lymphoblastic leukemia: a study from sought-eastern Iran”. 11th International Congress of Immunology & allergy Tehran-Iran April 2012

- Khorramdelazad H, “The status of regulated on activation normal T cell expressed and secreted
- (RANTES) and interleukin 6 serum levels in nephropathies type 2 diabetic patients”. 11th International Congress of Immunology & allergy Tehran-Iran April 2012
- Khorramdelazad H, “The CXC Chemokine CXCL12 tissue expression and circulating levels in patients suffering from induced peptic ulcer follows a phase-dependent fashion?” 6th International Congress of Laboratory & Clinic Tehran-Iran Feb 2014
- Khorramdelazad H, “HIGH SERUM LEVELS OF TGF-βIN IRANIANS WITH CHRONIC HBV INFECTION.” 5th International Congress of Tehran Hepatitis, Tehran, Iran, May 2014
- Khorramdelazad H, “Role of the eccentric exercise-induced delayed-onset muscle soreness effects on the regulation of the expression of S100A12, RAGE, and NFκB”. 11th International Congress of Immunology & allergy, May 2014, Tehran-Iran
- Khorramdelazad H, “The CCL5/CCR5 axis itself, but its CCR5 –Δ32 variant is involved in both T1D and T2D and nephropathies complications of T2D” 11th International Congress of Immunology & allergy. May 2014, Tehran-Iran
- Khorramdelazad H, “Differential pattern of eotaxins (CCL11, CCL24, CCL26) and CCR3 expression in Iranian Parkinson's patients” 14th International Congress of Immunology & allergy. April 2018, TehranIran (Oral Presentation)
- Khorramdelazad H, “Assessing the Expression of Immunosuppressive Cytokines in the newly diagnosed Systemic Lupus Erythematosus Patients: A Focus on B cells” 15th International Congress of Immunology & allergy. January 2021, Ahwaz-Iran (Poster Presentation)
- Khorramdelazad H, The S100 Proteins Expression in Newly Diagnosed Systemic Lupus Erythematosus Patients: Can They be Potential Diagnostic Biomarkers? 15th International Congress of Immunology & allergy. January 2021, Ahwaz-Iran (Poster Presentation).

8. Workshops attended:

- Quality control in Microbiology, Kerman-Iran, April 2009.
- SPSS workshop, Physiology and pharmacology research center, Rafsanjan-Iran 2013
- Computational Genomics, 4th International Tehran Hepatitis congress. Tehran, Iran, 2011
- Experiences in the Journal of Viral Hepatitis for Editors and how to write a good paper,4th International Tehran Hepatitis congress. Tehran, Iran, 2011
- Instructor, Primer design workshop, Rafsanjan University of Medical Sciences, 2014
- Real-time PCR and Epigenetic. Pasteur Institute of Iran, 2014
- microRNA, Biosynthesize and function-stem loop primer design 2018
- Dendritic cell-based vaccines for cancer immunotherapy: an experimental model 2018
- Advanced practical-surgical techniques in dealing with laboratory animals 2018
- Entrepreneurship and wealth creation, Iran University of Medical Sciences 2019
- Big Bang Boot Camp (Health Startups), Iran University of Medical Sciences 2019
- Ethics in research, Rafsanjan University of Medical Sciences 2020

- Ethics in research, Tehran University of Medical Sciences 2020
- CAR T-Cell Immunotherapy of Solid Tumors - Learning from the Clinic and Lab in Parallel, Labroots 2020
- A Novel Method for Quantitative Western Blotting that Eliminates Errors from the Use of Housekeeping Proteins, Labroots 2020
- Next generation ultra-high content analysis of the tumor immune microenvironment using MICS technology, Labroots 2020
- New Crossroad: The Intersection of COVID-19 and Sepsis, Labroots 2020
- laboratory animal handling technique, Qazvin University of Medical Sciences, 2020
- Scientific writing, USERN, 2021
- Introduction to basic statistics, USERN, 2021
- Systematic Review, USERN, 2021
- Meta-analysis, USERN, 2021
- Submission and Journal Selection, USERN, 2021
- Publishing books with international publishers, USERN 2021
- Second Advanced Academic Writing and English Editing Course, which was held virtually from March to April 2022, organized by Best Medical Academy in Iran

- Quality control in immunoserology laboratory, Kerman University of Medical Sciences 2023

- Ai application in research, Iran University of Medical Sciences, 2023

9. Webinar attended:

- Cell Therapy in COVID-19, 2020 IUMS

- Vaccination in COVID-19, 2020 IUMS
- Quality control in medical laboratories, 2021 IUMS
- Thyroid panel tests, 2021 IUMS
- Antigen purification, 2022 IUMS
- Introduction to basic bioinformtic, 2022 TUMS

10. Further Professional Training:

- DNA and RNA extraction from all cell and tissue systems

- PCR, RFLP
- Real-time PCR
- Western blotting
- Isolation of peripheral blood mononuclear cells
- ELISA
- Clinical and diagnostic laboratory techniques
- Primer design (PCR/RT-PCR/miRNA)
- Flowcytometry (Cyflow, Partec, Germany)

- Experience in software such as Gene Runner, Flowmax, Oligo7, Endnote, Adobe Photoshop, Adobe Illustrator, Corel Draw, Microsoft Office, Graphpad Prism, and Primer Express.
- Professional design of review articles, diagrams and figures (Sample: https://doi.org/10.1016/j.biopha.2022.113483)

11. General Contribution:

- Teaching basic immunology to undergraduate and postgraduate students 2016-2018
- Teaching Advanced Immunology to postgraduate students, 2018
- Teaching Research Methods to Undergraduate Postgraduate Students 2018-2019
- Holding a workshop on primer design for Real-time PCR, 2015
- Holding a workshop on bioinformatic (Gene to protein) 2021
- Holding a workshop on Article preparation and submission, Iran University of Medical Sciences, 2023
- Holding a workshop on Scietific illustration, Iran University of Medical Sciences, 2023

12. Related professional experience:

- Bio-art design studio (2017-present)

13. Interests:

- Research (Inflammation, Cytokine & Chemokine biology, Atuimmunity, Inflammatory-induced Cancers)
- Sport (Fitness and Physique)
- Art (Digital Graphic Design, Cartoon, Sketching, Photography, Adobe Illustrator)

14. References

- **Reza Falak, PhD**

Associated Professor of Immunology
Department of Immunology,
Iran University of Medical
Science, Tehran, Iran.
+989122753942
Falak.r@iums.ac.ir

- **Gholamhossein Hassanshahi, PhD**

Professor of Hematology
Department of Immunology,
Rafsanjan University of Medical
Science, Rafsanjan, Iran.

+989133933447
Ghassanshahi@gmail.com