

Curriculum vitae

Ali Gorgin Karaji. Ph.D.

Professor of immunology

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Date of Birth: 22st of Dec, 1965

Current Position

Researcher and lecturer at Kermanshah University of Medical Sciences.

Education and training

-1383 (2004) **Ph.D. in Immunology**, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

Thesis topic: "Evaluation of opioid receptors in lymphoid cells of mice suffering from Fibrosarcoma"

-1382/12/22 – 1383/6/26 (March 12 – September 16, 2004). **Overseas study** was undertaken for 6 months in the laboratory of Prof. Brigitte Linda Kiefer and Prof. Claire Gavériaux-Ruff in Institute IGBMC, Université de Strasbourg, Strasbourg, France.

-1374 (1995) **M.S. in Immunology**, School of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

Thesis topic: "Evaluation of Basophilic reaction in Guinea pig, following injection of sheep blood compartments"

-1367 (1988) **B.S., Biology**, School of Sciences, Razi University, Kermanshah, Iran.

Employment history

2025 – Currently: I am a university lecturer in the Department of Immunology, Faculty of Medicine, Kermanshah University of Medical Sciences. I teach immunology to medical, dental, and pharmacy students. I also involve in research and supervise student theses.

Feb 1999- 2004: PhD student in Immunology at the Faculty of Medicine, Tehran University of Medical Sciences, Tehran, Iran.

Feb 1995 – Feb1999: I was a university lecturer in the Department of Microbiology and Immunology, Faculty of Medicine, Kermanshah University of Medical Sciences. I taught immunology to medical, nursing, midwifery, and laboratory science students.

Publications:

1. Karamali, N., Mahmoudi, Z., Roghani, SA., Assar, S., Pournazari, M., Soufivand, P., **Gorgin Karaji, A.**, Rezaeiemanesh, A. Overexpression of Synoviolin and miR-125a-5p, miR-19b-3p in peripheral blood of rheumatoid arthritis patients after treatment with conventional DMARDs and methylprednisolone. *Clinical Rheumatology*, 2024, 43 (1), 147-157
2. Asadi, G., Feizollahi, P., Rajabinejad, M., Falahi, S., Varmaziar, FR., Faryadi, E., **Gorgin Karaji, A.**, Salari, F., Rezaeiemanesh, A. Comparison of the efficacy of combined budesonide and fexofenadine versus combined fluticasone propionate and fexofenadine on the expression of class-4 semaphorins and their... *Heliyon*, 2024, 10 (1)
3. Azadinejad, H., Feizollahi, P., Rezaeiemanesh, A., Salari, F., **Gorgin Karaji, A.** Relationship Between IL-10 Single Nucleotide Polymorphisms (rs1800871, rs1800872, and rs1800896) and the Severity of COVID-19. *Genetic Testing and Molecular Biomarkers*, 2024, 28 (11), 438-444.
4. Daneshfar, N., Falahi, S., **Gorgin Karaji, A.**, Rezaeiemanesh, A., Mortazavi, SHR., Akbari, B., Eivazi, A., Salari, F. Association of Single Nucleotide Polymorphisms (SNPs) of Chemoattractant Receptor23 (ChemR23) Gene with Susceptibility to Allergic Rhinitis. *Biochemical Genetics*, 2024, 62 (4), 2587-2605
5. Asadi, G., Falahi, S., Rajabinejad, M., Feizollahi, P., Mortazavi, SH., **Gorgin Karaji, A.**, Salari, F., Rezaeiemanesh, A. Altered Expression of Long Non-Coding RNAs NEAT1, H19, and MALAT1 in Peripheral Blood Cells of Patients with Allergic Rhinitis after Treatment with Pharmaceutical Combinations. *Scientific Journal of Kurdistan University of Medical Sciences*, 2023, 28 (1), 74-86

6. Eivazi, A., Akbari, B., Falahi, S., **Karaji, AG.**, Rezaeiemanesh, A., Mortazavi, SHR., Daneshfar, N., Salari, F. Association of Rs7217186 polymorphism of arachidonic acid 15-lipoxygenase (ALOX15) gene with susceptibility to allergic rhinitis. *Reports of Biochemistry & Molecular Biology*, 2023 12 (2), 269
7. Rezaeiianpour, R., Lotfi, R., Mortazavi, SH., **Karaji, AG.**, Rezaeiemanesh, A. Evaluating the Serum Levels of CCL17, CCL22, and CCL28 Chemokines and the Gene Expression of $\alpha 4\beta 1$ and $\alpha 4\beta 7$ Integrins in Patients with Allergic Rhinitis. *Acta Medica Iranica*, 2023; 61(8):459-764.
8. Falahi, S., Feizollahi, P., Monshizadeh, A., Mahmoudi, Z., Mahdavi, J., Salari, F., **Gorgin Karaji, A.**, Rezaeiemanesh, A. Association of ANRIL gene single-nucleotide polymorphisms with Allergic rhinitis in Kurdish population from Kermanshah, Iran..*Therapeutic Advances in Allergy and Rhinology*, 2023, 14, 27534030231170874
9. Bagherinia, E., Falahi, S., Mortazavi, SH., Salari, F. Rezaeiemanesh, A., **Gorgin Karaji, A.** Co-treatment with fexofenadine and budesonide increases FoxP3 gene expression in patients with allergic rhinitis. *American Journal of Rhinology & Allergy*, 2023, 37 (6), 623-629
10. Koohyanizadeh, F., Falahi, S., Mortazavi, SHR., Salari, F., Rezaeiemanesh, A., **Gorgin Karaji, A.** Correlation between IL-27p28 Genetic Polymorphisms and Risk of Allergic Rhinitis. *Gene Expression*, 2023, 22 (4), 281-287
11. Hassani, SS., Karamali, N., Rajabinejad, M., Ashjari, D., Afshar Hezarkhani, L., Gorgin Karaji, A., Salari, F., Rezaeiemanesh, A. Dysregulation of Long Noncoding RNA NEAT1/miR-199a-5/BiP Axis in Patients with Diabetic Neuropathy. *Laboratory medicine*, 2023, 54 (2), 160-165
12. Feizollahi, P., Zamanian, MH., Falahi, S., Salari, F., Mahmoudi, Z., Faryadi, E., Gorgin Karaji, A., Rezaeiemanesh, A. Association of IFIH1 and DDX58 genes polymorphism with susceptibility to COVID-19. *Medical Microbiology and Immunology*, 2023, 212 (3), 221-229
13. Molaie, M., Lotfi, R., Moghadam, RH., Rezaeiemanesh, A., **Karaji, AG.**, Salari, F. Imbalanced serum levels of resolvin E1 (RvE1) and leukotriene B4 (LTB4) may contribute to the pathogenesis of atherosclerosis. *Prostaglandins & Other Lipid Mediators*, 2023, 169, 106781
14. Falahi, S., Zamanian, MH., Feizollahi, P., Rezaeiemanesh, A. Salari, F., Mahmoudi, Z., **Gorgin Karaji, A.** Evaluation of the relationship between IL-6 gene single nucleotide polymorphisms and the severity of COVID-19 in an Iranian population. *Cytokine*, 2022, 154, 155889
15. Ashjari, D., Karamali, N., Rajabinejad, M., Hassani, SS., Hezarkhani, LA., Afshari, D., **Gorgin Karaji, A.**, Salari, F., Rezaeiemanesh A. The axis of long

non-coding RNA MALAT1/miR-1-3p/CXCR4 is dysregulated in patients with diabetic neuropathy. *Heliyon*, 2022, 8 (3)

16. Rajabinejad, M., Asadi, G., Ranjbar, S., Varmaziar, FR., Karimi, M., Salari, F., **Gorgin Karaji, A.**, Alireza Rezaieanesh, Leila Afshar Hezarkhani. The MALAT1-H19/miR-19b-3p axis can be a fingerprint for diabetic neuropathy. *Immunology letters*, 2022, 245, 69-78
17. Falahi, S., **Karaji, A.G.**, Koohyanizadeh, F., Rezaieanesh, A., Salari, F. A comprehensive in Silico analysis of the functional and structural impact of single nucleotide polymorphisms (SNPs) in the human IL-33 gene. *Computational Biology and Chemistry*, 2021, 94, 107560
18. Falahi, S., Salari, F., Rezaieanesh, A., (...), Lotfi, R., **Gorgin Karaji, A.** Association of interleukin-12B rs6887695 with susceptibility to allergic rhinitis. *Immunologic Research*, 2021, 69(2), pp. 189-195
19. Asadi, G., Rezaei Varmaziar, F., Karimi, M., (...), **Gorgin Karaji, A.**, Salari F., Afshar Hezarkhani, L., Rezaieanesh, A. Determination of the transcriptional level of long non-coding RNA NEAT-1, downstream target microRNAs, and genes targeted by microRNAs in diabetic neuropathy patients. *Immunology Letters*, 2021, 232, pp. 20-26
20. Davoodi, A., Lotfi, R., Mortazavi, S.H., **Gorgin Karaji, A.**, Rezaieanesh, A., Salari, F. Retinoic Acid Correlates with Reduced Serum IL-10 And TGF- β in Allergic Rhinitis. *Reports of Biochemistry and Molecular Biology*, 2021, 9(4), pp. 399-407
21. Lotfi, R., Davoodi, A., Mortazavi, S.H., **Gorgin Karaji, A.**, (...), Rezaieanesh, A., Salari, F. Imbalanced serum levels of resolvin E1 (RvE1) and leukotriene B4 (LTB4) in patients with allergic rhinitis. *Molecular Biology Reports*. 2020, 47(10), pp. 7745-7754
22. Koohyanizadeh, F., **Karaji, A.G.**, Falahi, S., Rezaieanesh, A., Salari, F. In silico prediction of deleterious single nucleotide polymorphisms in human interleukin 27 (IL-27) gene. *Meta Gene*, 2020, 25, 100710
23. Halashi, B., Tarokhian, H., Sayad, B., Salari, F., **Karaji, A.G.** Comparison of the sensitivity and specificity of modified rose Bengal and ELISA test in the diagnosis of brucellosis. *Scientific Journal of Kurdistan University of Medical Sciences*. 2020, 25(3), pp. 1-13
24. Rajabinejad, M., Asadi, G., Ranjbar, S., (...), **Gorgin Karaji, A.**, Rezaieanesh, A. Semaphorin 4A, 4C, and 4D: Function comparison in the autoimmunity, allergy, and cancer. *Gene*, 2020, 746, 144637
25. Rajabinejad, M., Ranjbar, S., Afshar Hezarkhani, L., (...), **Gorgin Karaji, A.**, Rezaieanesh, A. Regulatory T cells for amyotrophic lateral sclerosis/motor neuron disease: A clinical and preclinical systematic review. *Journal of Cellular Physiology*. 2020, 235(6), pp. 5030-5040

26. Falahi, S., Mortazavi, S.H.R., Salari, F., (...), Rezaei manesh, A., **Gorgin Karaji, A.** Association between IL-33 Gene Polymorphism (Rs7044343) and Risk of Allergic Rhinitis. Immunological Investigations. 2020, Article in Press
27. Rajabinejad, M., Salari, F., **Gorgin Karaji, A.**, Rezaei manesh, A. The role of myeloid-derived suppressor cells in the pathogenesis of rheumatoid arthritis; anti- or pro-inflammatory cells? Artificial Cells, Nanomedicine and Biotechnology, 2019, 47(1), pp. 4149-4158, Open Access
28. Sadeghalvad, M., Mohammadi-Motlagh, H.-R., **Karaji, A.G.**, Mostafaie, A. In vivo anti-inflammatory efficacy of the combined Bowman-Birk trypsin inhibitor and genistein isoflavone, two biological compounds from soybean. Journal of Biochemical and Molecular Toxicology. 2019, 33(12), e22406
29. Ramin Lotfi, Alireza Rezaei manesh, Seyed Hamidreza Mortazavi, **Ali Gorgin Karaji**, Farhad Salari. Immunosuppressants in asthma and allergic diseases: Review and update. J Cell Physiol. 2019 Jun; 234(6):8579-8596.
30. Hosseini Farzam, Abbas Farahani, Ali Tafkik, **Ali Gorgin Karaji**, Parviz Mohajeri, Mansour Rezaei, Fereshteh Jalalvandi. The antibacterial effect of tramadol against *Staphylococcus aureus* and *Pseudomonas aeruginosa*: in vivo study. *New Microbes and New Infections*. 2018 Jul; 24: 42–46.
31. Somayeh Shamlou, **Ali Gorgin Karaji**, Zahra Hasanpoor, Vahide Askari, Ali Mostafaie. The Effect of Shallot (*Allium Hirtifolium*) Extract on Profile of Th1/Th2 Cytokines in Balb/C Mouse Splenic Lymphocytes. Journal of Reports in Pharmaceutical Sciences. 2016, 5 (2) : 61-66
32. Razihi Rezaei, Ali Mostafaie, **Ali Gorgin Karaji**, Kamran Mansouri. The effect of standardized extract of *Echinacea purpurea* on cytotoxicity and proliferation of rat spleen lymphocyte cells. Journal of Applied Biological Sciences. 2015, 9(2): 19-22.
33. **Ali Gorgin Karaji**, Hamid Alipour, Alireza Ahmadi, Reza Mohammadi. Effectiveness of Wet-cupping in treatment of BALB/c mice infection by *Leishmania major*; pilot random trial. Afr J Tradit Complement Altern Med. (2015) 12(2):17-21.
34. **Karaji AG**, Hamzavi Y. The opioid antagonist naloxone inhibits *Leishmania major* infection in BALB/c mice. Exp Parasitol. 2012 Jan; 130(1):73-7
35. **Karaji AG**, Reiss D, Matifas A, Kieffer BL, Gavériaux-Ruff C. Influence of endogenous opioid systems on T lymphocytes as assessed by the knockout of mu, delta and kappa opioid receptors. J Neuroimmune Pharmacol. 2011 Dec;6(4):608-16.
36. **Karaji AG**, Abdi F, Rezaei M. The agreement rate of rose Bengal modified rose Bengal and rapid Wright tests for detection of positive serum sample of

- Brucellosis. Journal of Kermanshah University of medical sciences (Behbood), 2011, 31-39.
37. **Karaji AG**, Akbari M, Shabani S, Bahrami GR. The effect of daily injection of morphine on leishmaniose infection in mice. Journal of Kermanshah University of medical sciences (Behbood), 2011, 96-106.
 38. **Karaji AG**, Shabani S, Akbari M. The Effect of Morphine on Leishmania Major Infection in BALB /c and C57BL / 6 mice. Journal of Guilan University of medical sciences, 2011, 1-7.
 39. HAMZAVI Y., NOMANPOUR B., **GORGIN KARAJI A.** IDENTIFICATION OF SPECIES OF LEISHMANIA ISOLATED FROM PATIENTS WITH CUTANEOUS LEISHMANIASIS IN KERMANSHAH; USING RAPD-PCR TECHNIQUE. Journal of Kermanshah University of medical sciences (Behbood), 2010, 267-270.
 40. **Karaji AG**. Application of popliteal lymph node assay to evaluate tolerogenic effect of donor leukocyte infusion. Transpl Immunol. 2006 Jun;16(1): 20-4.
 41. **Karaji AG**, Khansari N, Ansary B, Dehpour Ar. Detection of opioid receptors on murine lymphocytes by indirect immunofluorescence: mature normal and tumor bearing mice lymphocytes. Int Immunopharmacol. 2005 Jun;5(6):1019-27.

Abstract Presentation in Congress:

1. Donya Ashjari, Negin Karamali, Seyedeh Sara Hassani, Leila Afsharhezarkhani, **Ali Gorgin Karaji**, Farhad Salari, Alireza Rezaieanesh. Evaluation of regulatory axis of lncRNA MALAT1/miR-1-3p/CXCR4 in the peripheral blood; A comparison between patients with and without diabetic neuropathy. 15th virtual International Congress of Immunology and Allergy, 27-29 January 2021, Ahvaz, Iran.
2. Seyedeh Sara Hassani, Donya Ashjari, Leila Afsharhezarkhani, **Ali Gorgin Karaji**, Farhad Salari, Alireza Rezaieanesh. Evaluation of the regulatory axis of long non-coding RNA NEAT1/miR199a-5p/heat shock protein A5 gene expression in patients with diabetic neuropathy. 15th virtual International Congress of Immunology and Allergy, 27-29 January 2021, Ahvaz, Iran.
3. Ramin Lotfi, Seyed hamidreza Mortazavi, **Ali Gorgin Karaji** and Farhad Salari. Increased Serum Level of Resolvin E1 but no Difference in Serum Levels of Resolvin D1 in Allergic Rhinitis Patients Compared to Healthy Subjects. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.
4. Razieh Rezaeianpour, Ramin Lotfi, Firoozeh Khamoushi, Seyed hamidreza Mortazavi, **Ali Gorgin Karaji** and Farhad Salari. Correlation of Serum Resolvins and the Quality of life in Allergic Rhinitis. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.

5. Akram Davoodi, Firooze khamoushi, Mohsen Molaei, Seyed Hamidreza Mortazavi, Farhad Salari and **Ali Gorgin Karaji**. The Relationship between Vitamin A and Serum IgE Level with Quality of Life in Patients with Allergic Rhinitis. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.
6. Elham Bagherinia, Seyed Hamidreza Mortazavi, Farhad Salari and **Ali Gorgin Karaji**. Budesonide and Fexofenadine Treatment Reduce Blood Eosinophils and Serum IgE in Allergic Rhinitis. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.
7. Elham Bagherinia, Seyed Hamidreza Mortazavi, Farhad Salari and **Ali Gorgin Karaji**. Treatment of Allergic Rhinitis with Fexofenadine and Budesonide reduces Clinical Symptoms and Improves the Quality of Life. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.
8. Atefe Mehrmanesh, Elham Bagherinia, Seyed Hamidreza Mortazavi, Farhad Salari and **Ali Gorgin Karaji**. Effect of Treatment with Fluticasone propionate and Fexofenadine on blood Eosinophil percentage and Serum IgE level in Allergic Rhinitis. 14th International Congress of Immunology and Allergy (ICIA 2018), 26-28 April 2018.
9. Behrooz Halashi, Hanieh Tarokhian, Babak Sayad, Farhad Salari, **Ali Gorgin Karaji**. Main causal agent of brucellosis in Kermanshah. 13th international Congress of Immunology and Allergy of Iran. 26-29 April 2016.
10. Behrooz Halashi, Hanieh Tarokhian, Babak Sayad, Farhad Salari, **Ali Gorgin Karaji**. Comparison between ELIZA and Other serological tests for diagnosis of human brucellosis. 8th International Congress of Laboratory & Clinic. Feb, 2016
11. **A. Gorgin Karaji**, Y. Hamzavi. The opioid antagonist naloxone inhibits Leishmania major infection in BALB/c mice. 14th International Congress of Immunology (Aug. 22-27, 2010), Kobe, Japan.
12. **Ali Gorgin Karaji**, Claire Gaveriaux-Ruff and Brigitte L. Kieffer. Humoral response in mice lacking an opioid receptor. 8th Iranian Congress of Immunology and Allergy, May 2006 Tehran University of Medical Sciences.
13. **Ali Gorgin Karaji**. Evaluation of the number of leukocytes required to induce tolerance in an immunotolerance protocol. 6th Iranian Congress of Immunology and Allergy, May 2002 Tarbiat Modares University.
14. **Ali Gorgin Karaji**, Ezatullah Kayhani. A comparative study of basophilia and eosinophilia during repeated subcutaneous injections and cutaneous basophil hypersensitivity (CBH). 14th Iranian Congress of Physiology and Pharmacology, May 1999 Tehran University of Medical Medical Sciences.
15. Mohammad Ali Zarei, **Ali Gorgin Karaji**, Ezatullah Kayhani. Revealing different subspecies of guinea pig basophils. 13th Iranian Congress of Physiology and Pharmacology, September 1997, Isfahan.

16. **Ali Gorgin Karaji**. Evaluation of an immunotolerance protocol using popliteal lymph node assay (PLNA) technique. 13th Iranian Congress of Physiology and Pharmacology, September 1997, Isfahan.
17. Mohammad Ali Zarei, **Ali Gorgin Karaji**, Ezatullah Kayhani. Mobilizing the population of guinea pigs basophils and eosinophils. Third Iranian Congress of Anatomical Sciences
18. Mohammad Ali Zarei, **Ali Gorgin Karaji**, Ezatullah Kayhani. Emergence of a new subtype in the guinea pig basophil white blood cell population. 2nd Blood and Related Diseases Congress, January 1996, Pasteur Institute, Razi Institute and Iran Blood Transfusion Organization.
19. **Ali Gorgin Karaji**, Mohammad Ali Zarei, Ezatullah Kayhani. Immunogenic properties of sheep blood and its components on guinea pig blood cells. 12th Iranian Congress of Physiology and Pharmacology, November 1995, Iran University of Medical Sciences.

Research projects:

1. Frequency of genetic variants of interleukin-6, interleukin-10 and interleukin-17 genes in patients with COVID-19 in Kermanshah population. Executor: Ali Gorgin Karaji. Participants: Farhad Salari , Alireza Rezaeiemanesh, Sara Fallahi.
2. Evaluation of MDA5 gene expression level and its relationship with gene expression level and serum level of IFN- α and IFN- β cytokines in COVID-19 patients (design number: 990792). Executor: Ali Gorgin Karaji and Mohammad Hossein Zamanian. Participants: Farhad Salari , Alireza Rezaeiemanesh, Sara Fallahi, Parisa Feizollahi, Alireza Janbakhsh, Siavash Vaziri, Mandana Afsharian, Feizollah Mansouri.
3. Comparative study of expression levels of ITGA4, ITGAm, ITGB1, ITGB2, and ITGB7 in peripheral blood cells of patients with allergic rhinitis before and after treatment with combination of fexofenadine- Fluticasone propionate or a combination of fexofenadine-budsonide. Executor: Ali Gorgin Karaji.
4. Comparative study of gene expression levels of transcription factors PU.1, IRF4 and BATF in peripheral blood cells of patients with allergic rhinitis before and after treatment with fexofenadine and fluticasone propionate. Supervisor: Ali Gorgin Karaji. Immunology Msc Thesis of Ali asghar Askari. August 2020
5. The Study of association of single nucleotide polymorphisms (rs153109 A>G and rs181206 T>C) of IL-27-P28 gene with IL-27 serum level and susceptibility to allergic rhinitis in Iranian Kermanshah populations. Supervisor: **Ali Gorgin Karaji** and **sayed hamidreza Mortazavi**. Immunology Msc Thesis of Farzaneh Kohyanizadeh. August 2019
6. The Study of genetic variants of Interleukin 33 gene and their relation with Interleukin 33 serum level in patients suffering from intermittent allergic rhinitis

in Kermanshah. Supervisor: **Ali Gorgin Karaji** and sayed hamidreza Mortazavi . Immunology Msc Thesis of Sara Falahi. August 2019

7. A comparison survey of GATA-3, ROR γ t and FOXP3 genes expression levels in peripheral blood cells of rhinitis patients, before and after treatment with Fluticasone propionate and Fexofenadine. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Atefeh Mehrmanesh. August 2018.
8. A comparison survey of GATA-3, ROR γ t and FOXP3 genes expression levels in peripheral blood cells of rhinitis patients, before and after treatment with fexofenadine and budesonide. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Elham Bagheinia. August 2018.
9. Clinical evaluation of "multiplex real time LAMP based on probe functionalized nanoparticles" for diagnosis of Brucella species. Supervisors: Amir Hoshang Alvandi, **Ali Gorgin Karaji**. Microbiology Msc Thesis of Bahareh Khodamoradi. August 2017.
10. The comparison of the levels of GATA-3, ROR γ t and FOXP3 transcription factors gene expression in peripheral Blood cells of Allergic Rhinitis, Non-Allergic Rhinitis and Healthy persons. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Soraya Bilvaeh. August 2017.
11. A survey on gene expression of transcription factors involved in cell differentiation of TH1, TH2 and Treg in peripheral blood leukocytes of patients with acute and sub-acute brucellosis compared with healthy subjects. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Saeed Jalilian. October 2016.
12. Comparison of anti-inflammatory effect of peduncles and roots extracts and essential oil of Echinacea purpurea in LPS induce inflammation in mouse. Supervisor: Ali mostafaei and Ali Gorgin Karaji. Immunology Msc Thesis of Narges Moasefi
13. The study of specificity and sensitivity of Wright, Modified Rose Bengal, Coombs Wright, 2-ME, ELISA & PCR tests in diagnosis of brucellosis. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Behrouz Halashi. February 2016.
14. In vitro Immunomodulatory effect of standard extract of Echnacea purpurea on

lymphocytes proliferation and cytokine (IL-4 & IFN- γ) production of Rat splenocytes. Supervisors: **Ali Mostafaie** and **Ali Gorgin Karaji**. Immunology Msc Thesis of Razieh Rezaei. November 2015.

15. Comparison of anti-inflammatory effect of peduncles and roots extracts and essential oil of Echinacea purpurea in LPS induce inflammation in mouse. Supervisors: **Ali Mostafaie** and **Ali Gorgin Karaji**. Immunology Msc Thesis of Narges Moasefi. July 2015.
16. Investigating the effect of Tribulus terrestris aqueous extract on IL-4 and IFN- γ cytokines in the thymus and T helper1, T helper2 and T helper17 subpopulations of rat mesenteric lymph nodes suppressed by cyclophosphamide. Supervisors: **Ali Mostafaie** and **Ali Gorgin Karaji**. Immunology Msc Thesis of Zahra Hasanpoor. February 2014.
17. Investigating the effect of shallot extract on the activity of TH1 and TH2 cells of Balb/C mice in in vitro and in vitro conditions. Supervisors: **Ali Mostafaie** and **Ali Gorgin Karaji**. Immunology Msc Thesis of Somayeh Shamlou. February 2014.
18. Production of Soybean Bowman-Birk trypsin inhibitor (BBI)-Genistein conjugate and coparison on anti-inflammtory potential of the conjugate and mixture of BBI and Genistein in mouse inflammation model. Supervisors: **Ali Mostafaie** and **Ali Gorgin Karaji**. Immunology Msc Thesis of Mona Sadeghalvad. Septamber 2013.
19. Purification of Soybean and sweet potato trypsin inhibitors and evaluation of anti-inflammatory effects in mouse model of multiple sclerosis (C57BL/6). Supervisors: **Ali Gorgin Karaji** and **Ali Mostafaie**. Immunology Msc Thesis of Maryam Omid Oskuie. Septamber 2012.
20. A study of effect of Lawsonia inermis's leaves and flowers extract on allergic reaction in BALB/c mice. Supervisor: **Ali Gorgin Karaji**. Immunology Msc Thesis of Mohsen Nesari. Septamber 2012.
21. Effet of morphine on cutaneous Leishmaniasis in BALB/c mice. Supervisor: **Ali Gorgin Karaji**. Pharmacy Thesis of Somaieh Shabani. January 2010.
22. Effet of morphine on cutaneous Leishmaniasis in C57BL/6 mice. Supervisor:

Ali Gorgin Karaji. Pharmacy Thesis of Mahin Akbari. January 2010.

Thesis Advisor:

1. Study of antibacterial effect of tramadol against bacterial infections associated with local and regional anesthesia in BALB/c mice. Supervised by Dr. Hoseen Farzan.

Advisors: Dr. Ali Gorgin Karaji, Dr. Parviz Mahajeri and Dr. Mansur Rezaii.

Professional anesthesiology Thesis of Dr, Ali Taftik. 2012.

2. Designing of ELISA method for measurement of IgM Rheumatoid Factor.

Supervisor: **Ali Mostafaie.** Advisor: **Ali Gorgin Karaji.** Immunology Msc Thesis of Brea zaman. Septamber 2012.