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COURSES TAUGHT:

1- Basic Immunology

2- Laboratory of Immunology

3- Basic Immunology

4- Vaccination

5- Immunogenetics

6- Immunochemistry

7- HLA

8- Mucosal Immunity

9- Immunology of Infectious Diseases

## RESEARCH PUBLICATIONS

1. Zavarani Hosseini; A. Eslami; M. B. and Jalali; M., Purification and characterization of protein Antigens isolated from Mycobacterium Tuberculosis (H37 Rv strain) and their Effects on cell - mediated Immune Responses in Guinea Pigs, MJIRI, Vol. 10, No.4, 291- 297, 1997.
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3. Zavarani Hosseini. A Torabfam. A and Rostaii, M. H., Effect of Attenuated Measles Virus Vaccine on Cell Mediated Immunity Following BCG Vaccination, Daneshvar, Vol. No. 15 & 16, 13- 22, 1997. (Persian ,Abstract in English)
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5. Zavarani Hosseini. A., Nikfargam. L and Poorfathellah. A. A., Nitric Oxide (No) Production by Balb/c Mice Macrophages Following BCG Vaccination, Daneshvar Vol. 6, No 23, 1999. (Persian , Abstract in English)
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- Antigen-G (sHLA-G) Isoforms and Regulatory T Cells in Relapsing-Remitting Multiple Sclerosis, *Iran J Allergy Asthma Immunol* , 2015; 14(3):298-305.
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  57. Maryam Azimi Mohamadabadi<sup>1</sup>, Zuhair Mohammad Hassan<sup>1\*</sup>, **Ahmad Zavaran Hosseini<sup>1</sup>**, Mehrdad Gholamzad<sup>1</sup>, Shekoofe Noori<sup>2</sup>, Mehdi Mahdavi<sup>3</sup>, Hamidreza Maroof, Arteether Exerts Antitumor Activity and Reduces CD4+CD25+FOXP3+ Treg Cells in Vivo, *Iran J Immunol*. 2013; 10(3):139-49
  58. <sup>4T</sup>Mousa Mohammadnia-Afrouzi<sup>4T</sup>, <sup>4T</sup>Ahmad Zavaran Hosseini<sup>4T</sup>, <sup>4T</sup>Ali Khalili<sup>4T</sup>, <sup>4T</sup>Saeid Abediankenari<sup>4T</sup>, <sup>4T</sup>Afshin Amari<sup>4T</sup>, <sup>4T</sup>Babak Aghili<sup>4T</sup> & <sup>4T</sup>Hadi Hossein Nataj<sup>4T3T,3T</sup> <sup>3T</sup>Altered microRNA Expression and Immunosuppressive Cytokine Production by Regulatory T Cells of Ulcerative Colitis Patients,<sup>3T</sup> *Immunological Investigations*, 2016, Vol 45(1), , 63-74
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  65. Esfandiari Azizi Ahmad Zavaran Hosseini Sara Soudi Ahmad Ali Noorbala Alteration of Serum Levels of Cytokines in Schizophrenic Patients before and after Treatment with Risperidone. *Iran J Allergy Asthma Immunol* 2019 Jun 8;18(3):262-268.
  66. Elham Zanganeh Sara Soudi Ahmad Zavaran Hosseini Arezou Khosrojerdi, Repeated intravenous injection of adipose tissue derived mesenchymal stem cells enhances Th1 immune responses in Leishmania major-infected BALB/c mice. *Immunol Lett* 2019 , 14;216:97-105
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  69. Elham Feizabadi, Ahmad Zavaran Hosseini, Sara Soudi, Arezou Khosrojerdi Studying the role of chitosan nanoparticle loaded with Leishmania major Secretory and excretory antigens on the number of apoptotic macrophages in parasite sensitive mouse. Khosrojerdi, *Scientific-*

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70. Elham Feizabadi, Ahmad Zavaran Hossieni, Sara Soudi, Effect of Intra-Peritoneal Injection of Chitosan Nanoparticle Loaded with Leishmania major Excretory-Secretory Antigens on Macrophage Function in Exposure to Parasites in BALB/c Mice, *Research in Medicine* 2019; Vol.43; No.2; 97-104 (Persian,Abstract in English)
  71. Fataneh Tavasolian, **Ahmad Z. Hosseini**, Ali Mirzaei, Elham Abdollahi, Pouria Jandaghi, Sara Soudi, Mahmood Naderi, Ehsan Saburi, Amir Abbas Momtazi-Borojeni, Thomas P. Johnston, Amirhossein Sahebkar, Unfolded protein response-mediated modulation of mesenchymal stem cells, *IUBMB Life*. 2019;1–11.
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## **LIST OF PAPERS PRESENTED IN CONGRESSES AND SEMINARS :**

1. Purification and characterization of protein Antigens Isolated from mycobacterium tuberculosis (H37 R7 strain) and their Effects on Cell - mediated Immune Responses in Guinea pigs., 3th congress of Immunology and Allergy, Shiraz, I. R. Iran, 1997.
2. Effect of BCG Activated Macrophages on Candida Killing, 12th congress of tuberculosis, Hamedan, I.R. Iran, 1995.
3. Effect of Attenuated Measles Virus on Cell Mediated Immunity Following BCG Vaccination, 23rd Middle East Regional of th International Union Against Tuberculosis and lung Disease (I.A.T.L.D), IR. Iran 1997.
4. Isolation and Purification of Glutathion transfrase from F. Hepatica, Second Congress of Parasitical Disease, Tehran, I.R. Iran, 1996.
5. Study of Nitric Oxide Production Following Vaccination of BALB/C Mice Against Rubella, The Fourth International Congress of Immunology & Allergy, Isfahan, I.R. Iran, 1998.
6. Study of Nitric Oxide Production in Human Monocyte and BALB/C Mouse Macrophage Following Contract with Candida albicans, The Fourth International Congress of Immunology & Allergy, Isfahan, I. R. Iran, 1998.
7. Study of Effect of Supplemental Arginine & Citrulline on Inhibition of Leishmania major Multiplication in BALB/C Mice, The Fourth International Congress of Immunology & Allergy, Isfahan, I.R. Iran, 1998.
8. Study of Cell Mediated Immunity (CMT) Following Vaccination of BALB/C Mice Against Rubella, The Fourth International Congress of Immunology & Allergy, Isfahan, I.R. Iran, 1998.
9. Nitric Oxide Production by BALB/C Mice Macrophages Following Sensitization by BCG, The 14th Nation wide congress on Tuberculosis kashan, I.R. Iran 1998.
10. Enterotoxin production by Staphylococcus aureus in Vitro.14th Iranian congress of Physiology and pharmacology, Tehran, I. R. Iran 1999.
11. Effect of Different concentration of Arginini or citrulline on Inhibition of Leishmania major Multiplication in Murine peritoneal Macrophages, 14<sup>th</sup> Iranian Congress of physiology and pharmacology, Tehran, I. R. Iran, 1999.
12. Double Role of Nitric Oxide in Clinical Condition of Infected BALB/C Mice with Leishmania Major, 14th Iranian Congress of Physiology and Pharmacology, Tehran, I. R. Iran, 1999.
13. Evaluation of the Production of cytokines in Human Hydatidosis, 5<sup>th</sup> Iranian Congress of Immunology and Allergy, Tehran, I.R. Iran, 2000.
14. Survival Rate and Cell Mediated Immunity of Balb/c Mice Immunized with Excretory, secretory Antigens of Toxoplasma gondaii, 5th Iranian Congress of Immunology and Allergy, Tehran, I.R. Iran, 2000.
15. Exvivo Evaluation of No production in Childhood All, 5th Iranian Congress of Immunology and Allergy, Tehran, I.R. Iran, 2000.
16. The Effect of Nitric Oxide (NO) Bonating Agent and Inhibitors of No synthase on IL-4 and production, 5th Iranian Congress of Immunology and allergy, Tehran, I.R. Iran, 2000.
17. Nitric Oxide (No) Production by macrophages of Balb/c mice sensitized with killed and viable BCG and Killed M. Tuberculosis (H37RV strain), 5<sup>th</sup> Iranian Congress of Immunology and Allergy, Tehran, Iran, 2000.
18. Purification of Cell Wall Mannoproteins Obtained From Candida albicans by Affinity Chromatography,Asian International Mycological congress ,Sep 2001,Karag,Iran
19. Immune Responses against Excreted/Secreted Antigens of Toxoplasma gondii Tachyzoitesin Murine Model,11th International Congress of Immunology, Stokholm,Sweden,22-27 .July 2001
20. Comparison between human and mice IFN-gama on nitric oxide production.6th Iranian Congress of Immunology and Alergy,Tehran,7-9 May 2002

21. Production of monoclonal Antibody Against Human Epsilon chain,6<sup>th</sup> Iranian Congress of Immunology and Alergy,Tehran,7-9 May 2002
22. Effect of the overload production of Nitric oxide on apoptosis of Balb/c Mice Macrophages Infected with L.major,6th Iranian Congress of Immunology and Alergy,Tehran,7-9 May 2002
23. Evaluation of T Lymphocyte responses against cell wall mannoproteins of Candidaalbicans,6th Iranian congress of Immunology and Alergy,Tehran,7-9 May 2002
24. Killing effect of antibiotics protein and peptide of human and rabbit neutrophils, Asian forum of Immunology and Oncology, Lebanon, Beirut, 21- 25 Aug, 2002
25. Evaluation of Nitric Oxide Production by Monocytes in Children with Acute Lymphoblastic Leukemia,ISH2002 , Korea Evaluation of Lymphocte Responses Against Cell Wall Momoproteins of Candida Albicans , The 8th Congress of the European Confederation of Medical Mycology – ECMM , Budapest , Hungary , August 25- 27 , 2002
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27. Purification of Main Metaloproteinase of Leishmania Surface Glycoprotein 63kD(GP63)from Logaritmice Leptomonades Leishmania(L) major (MRHO/IR/75/ER),4th national Iranian congress of Parasitology&Parasitic Diseases ,October13,2003,Mashhad,Iran
28. Abdollahi,Mahmoodzadeh.A.,Zavarani.A.,Dalimi.A”Evaluation of Excreted/Secreted Antigens Fractions of Toxoplasma Gondii Tachyzoites for Toxoplasmosis Diagnosis;4th National Iranian Congress of Parasitology & Parasitic Diseases ,October13,2003,Mashhad,Iran
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31. Zavarani Hosseini.A,Kharazi.S.and Tiraihi.T,Effect of Overload Production of Nitric Oxide On Apoptosis of Infected Balb/c Mice Macrophages with Leishmania major,15 european Immunology Congress(EFIS2003),June 8- 12,2003, Rhodes Island-Greece
32. Lymphocyte Proliferation Assay (LPA) of Acute Cutaneous Leishmaniasis and Without CL Individuals on GP63 and LPG Molecules Purified from Leishmania(L) major (MRHO/IR/75/ER),The 7th Congress of Immunology &Allergy, 4-7 May2004,Mashhad,Iran
33. Zavarani Hosseini .A.,Fattahi.A.,Dalimi Asl.A., Mahmoodzadeh.A and Ghafari.F.,Evaluation of Cell Mediated Immunoresponces Against GP63 and LPG Molecules Purified from Leishmania (L) major [MRHO/IR/75/ER] in Healing and Non-Healing Human Patient,The 7th Congress of Immunology & Allergy,4-7 May 2004,Mashhad,Iran
34. Daryani.A, Zavarani.H.A, Dalimi asl.A ,Immun Responses Against Excreted / Secreted Antigens from Peritoneal Exudates of Infected Mice, 12th International congress of Immunology, 18 – 23 July 2004, Montreal, Canada
35. Zavarani.H.A, Yari.F, Gorgani.N, Khorrami zade.MR, Mansouri.P, Differential Pattern of HLA-G Expression in Human Epidermal skin Cells of Normal vs.Autoimmune (Pemphigus Vulgaris) Individualls, 18 – 23 July 2004, Montreal, Canada
36. Zavarani.H.A, Fattahi.A, Dalimi asl.AH, Mahmoud zadeh.A, Ghaffari.F, Evaluation of Cell Mediated Immunoresponces Against GP63 and LPG Molecules Purified from Leishmania (L)major In Healing and Non-Heal Human Patients ,18 – 23 July 2004, Montreal, Canada
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39. Sotoodeh.M,Zavaran.H.A,Asilian H.and Mohammadi Roudbari.S’Study of Allergic Effects of Wheat Flour Dusts on Yasug Flour Mill Workers,The second Iranian Asthma Meetin,2005,Iran.
40. Zavaran.H.A.” Nitric Oxide (NO) in Patients with Asthma” The second Iranian Asthma Meetin,2005,Iran
41. Farzaneh.P.,Hassan.Z.H,Pourpak .Z,Zavaran H.A.and Zahedi.F”The Comparison of Bronchoalveolar Lavage Fluid Level in Acute and Chronic Allergic Airway InflammATION Murine Models, The second Iranian Asthma Meetin,2005,Iran.
42. Farzaneh.P.,Hassan.Z.H,Pourpak .Z,Zavaran H.A.and Zahedi.F “CoSensitization of Allergens May Lead to Augmentation of Allergic Airway Inflammation Lesions in an Acute Murine Model, The second Iranian Asthma Meetin,2005,Iran.
43. Soudi.S.,Hashemi.S.M,Ghaemi.A.and Zavaran.H.A” Inhibitory Activity of Echinacea Purpurea Extract on Nitric Oxide Production in LPS Activated Macrophages,8th Iranian Congress of Biochemistry and The 1th International Congress of Biochemistry &Molecular Biology,Sep.11-15,2005,Tehran,Iran.
44. Soudi.S.,Hashemi.S.M,Ghaemi.A.and Zavaran.H.A,The Effect of Echinacea Extract on Viability,Proliferation and Morphology of Spleenocytes and Macrophages in Vitro, 8th Iranian Congress of Biochemistry and The 1th International Congress of Biochemistry &Molecular Biology,Sep.11- 15, 2005, Tehran,Iran.
45. Zamani-taghizadeh.S.,Zavaran H.A.”The role of G6PD Activity on Nitric Oxide Production And Cell Viability in Balb/c Peritoneal Macrophages, 8<sup>th</sup>Iranian Congress of Biochemistry and The 1th International Congress of Biochemistry &Molecular Biology,Sep.11-15,2005,Tehran,Iran
46. Arzanlou M., Rezaee A., Shahrokhi N., Zavaran Hosseini A., Ahangarzadeh Rezaee M Expression of B subunit of cholera toxin in *Saccharomyces cerevisiae* ,
47. Arzanlou M., Rezaee A., Shahrokhi N., Zavaran Hosseini A., Ahangarzadeh Rezaee M Expression of B subunit of cholera toxin in *Saccharomyces cerevisiae* ,15<sup>th</sup>European Congress of Clinical Microbiology and Infectious Diseases,Copenhagen / Denmark, April 2- 5, 2005
48. Zamani Taghizadeh.S.,Zavaran Hosseini.A. and Mesbah Namin.S.A,The role of 6-Aminonicotinamide on the Resistance of J774A.1 Macrophage Line against *Leishmania major*,The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006
49. Zamani Taghizadeh.S.,Zavaran Hosseini.A. and Mesbah Namin.S.A,The Role of Dehydroepiandrosterone on the Cell Cytotoxicity and NO Production in J774.1 Line Macrophages,The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006.
50. Zamani Taghizadeh.S.,Zavaran Hosseini.A. and Mesbah Namin.S.A,Increase in BALB/c Peritoneal resistance treated with Lipopolysaccharide and Melatonin against *Leishmania major* Infection, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006
51. Zamani Taghizadeh.S.,Zavaran Hosseini.A et al,Study the Mechanism of *Ganoderma Lucidum* Polysaccharide Extract on the Functions of Balb/c Peritoneal Macrophages, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006.
52. Zamani Taghizadeh.S.,Zavaran Hosseini.A. and Mesbah Namin.S.A,Study of tinhibitory effect of 6-Aminonicotineamide on G6PD activity and NO Production in Balb/c Peritoneal Macrophages, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006.
53. A.K.Jalilvand, Zavaran Hosseini.A.Fattahi.A. and Soudi.S.,Protective effect of Vitamine D3 and GP63 Conjugated with Tetaneus Toxoid on outcome of Cutaneous *Leishmaniasis* Lesions in Balb/c Mice. The 8<sup>th</sup> Iranian Congress of Immunology & Allergy,Tehran, Iran,16-18 May 2006
54. Pirdel.L, Zavaran Hosseini.A and Tiraihi.T.,Studies on the Role of Iron Overload in Apoptosis of Balb/c Mice Macrophages Infected with *Leishmania major* iIn Vitro, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006

55. Souidi.S.,Hashemi.S.M.,Ghaemi.A.and , Zavarán Hosseini.A.,Leishmania Activity of Echinacea Purpurea Root Extract Cultivated in Iran, The 8<sup>th</sup>Iranian Congress of Immunology & Allergy, Tehran, Iran,16-18 May 2006
56. Shams.A.,and Zavarán Hosseini.A.,MDR Immune System Function, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006 56-Souidi.S.,Hashemi.S.M.,Ghaemi.A.and , Zavarán Hosseini.A.,Inhibitory Activity of Echeanacia Purpurea Root Extract on Macrophage Function, The 8th Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006.
57. Roudbarmohammadi.S., Zavarán Hosseini.A,Khosravi.A. and Aslani .J,Immunological Evaluation of Aspergillus fumigatus Catalase Antigen conjugated with Tetanus toxoid as a Vaccine in Murine Model, The 8<sup>th</sup>Iranian Congress of Immunology & Allergy,Tehran,Iran,16-18 May 2006.
58. Zavarán Hosseini.A.1, S zamani Taghizadeh rabe, SA. Mesbah Namin. The role of g6pd activators on the resistance of murine peritoneal macrophages against leishmania major, 16th European congress of Immunology, Paris,France, Sep 6-9,2006.
59. Zavarán hosseini.A., S Souidi, S Rafati, R hashemi fesharaki, K Esmailnia, S Hashemi. Rectal immunization with mycobacterium bovis protects susceptible balb/c mice against leishmania major, 16th European congress of Immunology, Paris,France, Sep 6-9,2006.
60. Zibandeh khouy.z., J Majidi, A Zavarán Hosseini.A., Z.M Hassan Generation and partial characterization of monoclonal antibody specific for human IgM,16th European congress of Immunology, Paris,France, Sep 6-9,2006.

### **SEARCH PROJECT :**

- 1) Evaluation on different methods for PPD providing in different stage.
- 2) Determination of synergistic Effects of Allergens in Allergic Asthma and its Possible Mechanisms in a Murine Model.

### **BOOKS :**

- 1-Pediatric Immunology (Translated to Farsi)

### **RESEARCH STUDENTS SUPERVISE:**

1. Study of Intracellular Killing of Candida by Activated Macrophages. By: Farahyar. S, M. Sc
2. Purification and Partial Characterization of Candida albicans Protein Antigens. By: M.M. Mozafari; M. Sc.
3. Study of Cell Mediated Immunity (CMI) Against Measles Virus. By: Torabfam. A; M. Sc.
4. Study of Effect of supplemental Arginine and Citrulline on Inhibition of Leishmania major Multiplication BALB/C Mice. By: Razmjoo. E; M. Sc
5. Study of Cell Mediated Immunity & Nitric Oxide Production Following Vaccination with Rubella vaccine in BALB/C Mice. By: Nikfarjam. L; MSc
6. Study on the Effect of Vitamin D3 and Interferon Gamma on Proliferation of Leishmania major in BALB/C Macrophages invitro. By: Agholi. M Sc
7. Study of Nitric Oxide production in BALB/C Mice Macrophages and Human Monocyte Following Contact with Candida albicans. By: Pakzad: MSc
8. Study of Allergic Effects of Wheat Flour Dusts on Yasuj Flour Mill Workers and its possible Remedial Measures. By: sotoodeh. M; MSc
9. Study of Nitric Oxide production in pre & post Treatment of Acute Lymphocytic Leukemia By: Chegini.M, MSc
10. Study of Nitric Oxide Production Following Immunization with BCG, Killed BCG and Killed Mycobacterium tuberculosis (H37R7 Strain) By: Agai.F. MSc

11. Study of Nitric Oxide Effect on Secretion of T- helper 1 and T- helper 2- Associated Cytokines.  
By: Aliabdi. E. Ph.D
12. Production and partial Characterization of Monoclonal Antibody against purified Human. IgE in Order to Designing of Eliza Kit, By: Majidi. J; Ph. D
13. Evaluation of Cell Mediated Immunity (CMI) Against Excretory Antigens of Toxoplasma by :  
Dariani. A; Ph.D
14. Immunological Evaluation of Aspergillus Fumigatus Catalase antigen conjugated with Tetanus Toxoid as a vaccine in murine model,Ph.D
15. Study of the Effect of Overload Production of Nitric Oxide on Apoptosis of Balb/c Mice Macrophages Infected with Leishmania Major,MSc
16. The Purification of Human and Rabbit Neutrophils Antimicrobial Peptides and Comparison of Their Killing Effect on the E.colli , S.Typhi and C.albicans Micro Organisms , Ph.D
17. Study of Protection of Vitamin D and GP63 Conjugated with Tetanus Toxoid on Outcome of L.major Lesion in Balb/c Mice, MSc
18. Isolation of Lactoferrin From Neutrophils of Human Infected with Hepatit C , MS.c
19. Study of HLA-G Expression in Keratinocyte Cells of pemphigus Vulgaris disease in Human , Ph.D
20. Evaluation of Cell Mediated Immunity Against GPb3 and LPG purified from L.Major in Balb/c Mice and Healing and non Healing Humans. Ph.D
21. Studies and Characterize the Function and Regulation of T and NKT Cells in MDR Tuberculosis Patient,Ph.D Thesis
22. Cloning and Expression of GP63 –HSP70 fusion Protein of Leishmania and Evaluation of Immune responses Against it invivo and invitro,Ph.D Thesis
23. Studies of Nitric oxide and Hydrogen peroxide Production in Neutrophils and Monocytes in Patient with Urinary tract Infection before and after CiprofloxacinThrapy,Msc. Thesis
24. Study of the Effect of Iron Overload on Apoptosis of Balb/c Macrophages Infected with Leishmania major,Msc Thesis
25. *Cloning and Expression of GP63-HSP70 Fusion Protein of Leishmania and Evaluation of Immune Response Against It In vivo and In vitro,Ph.D.Thesis*
26. Study on the HLA-G Polymorphism in the Normal Population, Ms Thesis
27. Production and Characterization of a Novel Immunoliposome, Encapsulated Anthrax Lethal Factor Toxin ,Targeted by Recombinant Nanobody Anti-CD19 And Evaluations of Cytotoxicity on the Human B Cell Line,PhD Thesis
28. Soluble HLA-G 5,6,7,Expression in Gastric Adenocarcinoma,Msc Thesis
29. Study of microRNA expression protein in colon cancer stem cells and evaluating immunomodulatory effects of miR-146a on immune response,PhD Thesis
30. Evaluation of Balb/c peritoneal macrophages function, sensitized with two -Alumina and Chitosan nanoparticles loaded with Leishmania major Secretory and Excretory Antigens , Msc Thesis.
31. Production of a Mycobacterium tuberculosis Fusion Protein consist of ESAT-6 with HSP70 and Evaluation of Immune Responses Following Intranasal Administration, PhD Thesis
32. Production of Monoclonal Anti-EGFR-recombinant PE38 Immunotoxin and Evaluation of it s Effect on Induction of Apoptosis in Tumoral cell line, PhD Thesis
33. Production of Anti-VEGFR-2 recombinant PE38 Immunotoxin and Evaluation of Its Effect on the HUVEC and MCF-7 Cell Lines In Vitro, PhD Thesis
34. Survey on the prevalent HLA-E alleles (HLA-E\*01:01, HLA-E\*01:03) in normal population of Iran and compare it with hyperglycemia subject,Msc Thesis
35. Study the effect of isolated fibroblasts from BCG stimulated lymph nodes of mouse to induce regulatory T cells from naive T cells, Msc Thesis

36. Study of the immunomodulatory effect of BALB/c & C57BL/6 MSC on Leishmania major infected peritoneal macrophage function, Msc Thesis
37. Survey on the correlation between c.1119 c<t (rs5888) singel nucleotide polymorphism in Scavenger Receptor B1 gene and lipid levels in hyperlipidemia subjects, Msc Thesis
38. Survey on the correlation between the frameshift mutation 1637delc (rs:28357092) in ficolin3 gene and type 2 Diabetes, Msc Thesis
39. Evaluation of association between Artemisia vulgaris allergy with subtype of HLA-DRB1 in Khorasan, Msc Thesis
40. Study of the effect of zinc on the process of autophagy in BCG infected macrophages, Msc Thesis
41. Study effect CPA (Cysteine peptidaes A), CPB (Cysteine peptidaes B) conjugated with alpha-alumina nanoparticle in induction autophagy-dependent cross-presentation and in vitro leishmania major growth inhibition.PhD Thesis
42. Comparson of Pattern of Autophagy in Mycobacterium bovis (BCG) and Leishmania major in Balb/c mice macrophages, Msc Thesis
43. Cloning and Expression of LPG3 Gene of Leishmania infantum in Leishmania Tarentolae and Evaluation of Immune Responses against it in BALB/c Mice, PhD Thesis
44. Study of the Effect of Vitamin D and GP63 Conjugated with Tetanus Toxoid on outcome of Leishmania Lesions in BALB/c Mice, Ms Thesis
45. Study the effect of L.major infected macrophages on the induction and function of induced FOXP3+ Treg, PhD Thesis
46. Study the effect of intraperitoneal injection of two -Alumina and PLGA nanoparticles loaded with two Cystein peptidase antigens A,B (CPA&CPB) on Leishmania major lesion development in Balb/c mice, PhD Thesis
47. Investigation of expression level of miR-21, miR-31, miR-146a and miR-155 in T regulatory cells of Ulcerative Colitis patients and their relation with Treg cells number and suppressive function, PhD Thesis
48. Study on the Polymorphism of the Genes CD127, CD25, CD58, CD226 and HLA-G in Relapsing Remmiting Multiple Sclerosis (RRMS) Patients in Order to Identify Disease Susceptibility Gene Variants and Determine Changes in T reg Populations in sHLA-G+ Patients,PhD Thesis
49. Comparing the expression level of miR-146a and miR-155 in macrophages derived from peripheral blood of patients with schizophrenia and healthy controls in response to intracellular pathogens (Toxoplasma, Leishmania), PhD Thesis

## **RESEARCH STUDENTS CO-SUPERVISE**

1. Enterotoxin production by staphylococcus aureus in vitro.MSc
2. Isolation and purification of Hydatid Fluid Antigen and Evaluation of Cell Mediated Immunity .and production of Cytokines in Hydatid patients.Ph.D
3. Study of Effect of C.albicans Antigen on Th1 and Th2 Cytokine secretion patterns in BALB/C .Mice.Ph.D
4. Study on Immune Response Against GST Purified Antigen of fasciola Gicantica.Ph.D
5. Evaluation of Catalase Activity of Aspergillus fumigatus Pathogenic Isolate Using Rat Serum Antiprotease as a Factor in Pathogenicity.Ph.D
6. Evaluation of Immune response against Recombinant Fusion Protein L7/L12-Human Serum Albomin with Lipopolysacaride of Brucella Abortus in Muren Model.Ph.D
7. Isolation of Extracellular Aspartil Proteinases from Isolated Candida Albicans.MSc
8. Evaluation of Elastase Activity in Aspergillus Pathogenic isolate Using rat Serum Antiprotease as a Factor in Pathogenicity , Ph.D
9. Effect of Antibiotic on Nitric Oxide Production Induced by S.aures in Mice Macrophages , MS.c
10. Production of Monoclonal Antibody Against Human IgG , MS.c

11. Isolation and Purification of FHA and PT Antigen of B.Pertusis for using as a Vaccine Against B.pertusus , Ph.D Thesis
12. Study the effect of Adipose-derived mesenchymal stem cell injection on immune responses to Leishmania major infection in BALB/c mice, Ms Thesis
13. Immunomodulatory effects of Arteether in tumor bearing mice, Ms Thesis
14. A comparative analysis of acquired immune responses and expression patterns of miR-21, miR-31, miR-146a and miR-155 in patients with latent and active tuberculosis and healthy individuals, PhD Thesis