

Curriculum Vitae

1. Personal Information:

Name Mojtaba
Surname Sankian
Date of birth April 22, 1971
Place of birth Waramin, Iran
Sex Male
Nationality Iranian
Marital status Married
Hobbies Reading



2. Addresses:

Residential Mashhad- Iran
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- 3. Educations:**
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|---|--|
| 2006 Ph.D. in immunology | Mashhad University of Medical Sciences |
| The Title of Ph.D Thesis: Characterization, cloning and expression of Melon allergens | |
| 1997 M.Sc in immunology | Tehran University of Medical Sciences |
| 1994 B.Sc. in Microbiology | Azad University of Qom |

4. Current position:

Associate professor, Mashhad University of Medical Sciences, Mashhad, Iran, 2007 –Now.

5. Professional experiences:

Research experiences:

- Characterization, Cloning and Expression of Allergenic Proteins
- Recombinant allergen modification for immunotherapy proposes
- Innate Immunity against Bacterial and Viral Pathogens
- Relationship between Innate Immunity and Asthma

Technical experiences

Molecular biology methods:

- Gene cloning techniques
- Recombinant protein expression in Pichia, E. coli and insect expression systems
- Different methods of DNA and RNA extraction, cDNA synthesis
- Developing RT-PCR, Multiplex PCR, and Real-time PCR

- Gene array Technology (Chemiluminescent Detection System)

Immunochemistry methods:

- Developing of ELISA
- ELISPOT
- SDS-PAGE, Western Blotting
- Protein Purification, Dialysis, Lyophilization,
- Chromatography: affinity, immunoaffinity, Ion Exchange, Gel Filtration (Laboratory and Semi industrial Scale, Precipitation techniques, Ultrafiltration techniques
- Bradford Protein Quantification
- Polyclonal and Monoclonal antibody production

Other methods:

- Tissue Culture using a variety of mammalian cell lines
- Immunofluorescence assay
- Chemiluminescence methods

Allergen deposition in the IUIS for the first time:

No	Authors	allergen	year
1.	Assarehzadegan,M.A., Sankian ,M. and varasteh,A.	Sal k 3	2009
2.	Assarehzadegan,M.A., Sankian ,M. and varasteh,A.	Sal k 4	2009
3.	Sankian ,M, Pazouki,N., Nejadsattari,T., Khavari-Nejad,R.A. and Varasteh,A.	<u>Pla or 2</u>	2008
4.	Sankian ,M, Pazouki,N., Nejadsattari,T., Khavari-Nejad,R.A. and Varasteh,A.	<u>Pla or 3</u>	2008
5.	Sankian ,M, Pazouki,N., Nejadsattari,T., Khavari-Nejad,R.A. and Varasteh,A.	<u>Pla or 1</u>	2008
6.	Sankian ,M., Varasteh,A., Mahmoudi,M.	Cuc m 2	2005
7.	Varasteh,A.-R., Pomes,A., Sankian ,M. and Chapman,M.	Cro s 1	2005

Deposition of 21 Allergen sequences in the GenBank for the first time:

1. *Chenopodium album*, Che a 2 pollen allergen mRNA, partial cds, 399 bp linear mRNA
FJ985985.1 GI:238886047
2. *Salsola kali* Sal k 3 pollen allergen mRNA, partial cds, 2,271 bp linear mRNA
FJ821454.1 GI:225810598
3. Human T-lymphotropic virus 1 isolate MTA-1 from Iran truncated envelope glycoprotein gene, partial cds, 435 bp linear DNA
DQ911752.1 GI:114803748
4. *Amaranthus retroflexus* pollen allergen MetE mRNA, partial cds, 2,271 bp linear mRNA
HQ270475.1 GI:309756514
5. *Salsola kali* Sal k 4 pollen allergen mRNA, partial cds, 399 bp linear mRNA
GQ145223.1 GI:239916565
6. *Salsola kali* Sal k 1 pollen allergen mRNA, partial cds, 1,017 bp linear mRNA
FJ821453.1 GI:225810596
7. *Cucumis melo* var. reticulatus cultivar Mashadi profilin (Cuc m2) mRNA, complete cds; alternatively polyadenylated 2, 655 bp linear mRNA
AY292386.3 GI:57021113
8. *Cucumis melo* var. reticulatus cultivar Mashadi profilin (Cuc m2) mRNA, complete cds; alternatively polyadenylated 3, 779 bp linear mRNA

AY292387.3 GI:57021111
9. *Cucumis melo* var. reticulatus profilin (Cuc m2) mRNA, complete cds, 396 bp linear mRNA
AY271295.2 GI:57021109
10. *Cucumis melo* var. inodorus pathogen-related protein 1 alternative isoform mRNA, complete cds, alternatively spliced, 457 bp linear mRNA
EU679402.1 GI:188090892
11. *Platanus orientalis* pollen allergen Pla o 1 mRNA, complete cds, 513 bp linear mRNA
EU296476.1 GI:162949335
12. Cloning vector pET21b+PA, complete sequence, 7,182 bp circular other-genetic
EF550209.1 GI:147743336

13. *Cucumis melo* var. *reticulatus* profilin (Cu m2) mRNA, complete cds, 634 bp linear mRNA
AY292385.2 GI:57021115

14. *Crocus sativus* pollen allergen Cro s 1 mRNA, complete cds, 507 bp linear mRNA
AY923864.1 GI:62720369

15. *Amaranthus retroflexus* Ama r 2 pollen allergen mRNA, partial cds, 400 bp linear mRNA
FJ899746.1 GI:227937303

16. *Cucumis melo* var. *inodorus* pathogen-related protein 1 (Cuc m 3) mRNA, complete cds, 456 bp linear mRNA
EU556704.1 GI:171464769

17. *Platanus orientalis* pollen allergen Pla o 3 mRNA, complete cds, 357 bp linear mRNA
EU296478.1 GI:162949339

18. *Platanus orientalis* pollen allergen Pla o 2 mRNA, complete cds, 1,137 bp linear mRNA
EU296477.1 GI:162949337

19. *Crocus sativus* profilin mRNA, complete cds, 396 bp linear mRNA
AY898658.1 GI:58700650

20. *Cucumis melo* profilin (m2) mRNA, 5' UTR and partial cds, 262 bp linear mRNA
AY879598.1 GI:58263798

21. *Cucumis melo* profilin (m2) mRNA, complete cds and 3' UTR, 576 bp linear mRNA
AY879597.1 GI:58263792

Publications:

(1-141)

1. Salimiyan Rizi K, Aryan E, Meshkat Z, Ranjbar G, Sankian M, Ghazvini K, et al. The overview and perspectives of biosensors and *Mycobacterium tuberculosis*: A systematic review. *J Cell Physiol.* 2021;236(3):1730-50.
2. Rizi KS, Hatamluyi B, Rezayi M, Meshkat Z, Sankian M, Ghazvini K, et al. Response surface methodology optimized electrochemical DNA biosensor based on HAPNPTs/PPY/MWCNTs nanocomposite for detecting *Mycobacterium tuberculosis*. *Talanta.* 2021;226:122099.
3. Lotfi H, Sankian M, Meshkat Z, Khalifeh Soltani A, Aryan E. *Mycobacterium simiae* pulmonary infection: a case series and literature review. *Respirol Case Rep.* 2021;9(3):e00719.
4. Lotfi H, Aryan E, Sankian M, Meshkat Z, Khalifeh Soltani A, Alvandi AH, et al. A case of multidrug-resistant *Mycobacterium simiae* in an elderly woman. *Respirol Case Rep.* 2021;9(3):e00715.
5. Dehghan-Manshadi M, Nikpoor AR, Hadinedoushan H, Zare F, Sankian M, Fesahat F, et al. Preventive Cancer Vaccination by P5 HER-2/neo Derived Peptide-pulsed Peripheral Blood Mononuclear Cells in Mouse Model of Breast Cancer. *Biochem Cell Biol.* 2021.
6. Dehghan-Manshadi M, Nikpoor AR, Hadinedoushan H, Zare F, Sankian M, Fesahat F, et al. Protective immune response against P32 oncogenic peptide-pulsed PBMCs in mouse models of breast cancer. *Int Immunopharmacol.* 2021;93:107414.
7. Zare H, Rezayi M, Aryan E, Meshkat Z, Hatmaluyi B, Neshani A, et al. Nanotechnology-driven advances in the treatment of diabetic wounds. *Biotechnol Appl Biochem.* 2020.
8. Vasiee A, Norouzi N, Yazdi FT, Mortazavi SA, Sankian M, Mahmoudi M, et al. Analysis of different signal peptides for the secretory production of Ama r 2 in gram-positive systems (*Lactococcus lactis*). *Microb Pathog.* 2020;138:103819.
9. Vasiee A, Falah F, Sankian M, Tabatabaei-Yazdi F, Mortazavi SA. Oral Immunotherapy Using Probiotic Ice Cream Containing Recombinant Food-Grade *Lactococcus lactis* Which Inhibited Allergic Responses in a BALB/c Mouse Model. *J Immunol Res.* 2020;2020:2635230.
10. Shahgordi S, Sankian M, Yazdani Y, Mashayekhi K, Hasan Ayati S, Sadeghi M, et al. Immune responses modulation by curcumin and allergen encapsulated into PLGA nanoparticles in mice model of rhinitis allergic through sublingual immunotherapy. *Int Immunopharmacol.* 2020;84:106525.
11. Sadeghi S, Jalali M, Nikravesh MR, Sankian M. Effect of experimental hyperthyroidism on CatSper1 and CatSper2 genes expression in the seminiferous tubules of BALB/c mice: An experimental study. *Int J Reprod Biomed.* 2020;18(8):591-604.
12. Sadeghi M, Koushki K, Mashayekhi K, Ayati SH, Keshavarz Shahbaz S, Moghadam M, et al. DC-targeted gold nanoparticles as an efficient and biocompatible carrier for modulating allergic responses in sublingual immunotherapy. *Int Immunopharmacol.* 2020;86:106690.
13. Moradi B, Sankian M, Amini Y, Gholoobi A, Meshkat Z. A new DNA vaccine expressing HspX-PPE44-EsxV fusion antigens of *Mycobacterium tuberculosis* induced strong immune responses. *Iran J Basic Med Sci.* 2020;23(7):909-14.
14. Mashayekhi K, Ganji A, Sankian M. Designing a new dimerized anti human TNF-alpha aptamer with blocking activity. *Biotechnol Prog.* 2020;36(4):e2969.

15. Koushki K, Varasteh AR, Shahbaz SK, Sadeghi M, Mashayekhi K, Ayati SH, et al. Dc-specific aptamer decorated gold nanoparticles: A new attractive insight into the nanocarriers for allergy epicutaneous immunotherapy. *Int J Pharm.* 2020;584:119403.
16. Khordad E, Nikravesh MR, Jalali M, Fazel AR, Sankian M, Alipour F. Diabetes up-regulated collagen IV and laminin alpha5 genes in mRNA and protein levels in seminiferous tubules of C57BL/6 adult mice. *Cell Mol Biol (Noisy-le-grand).* 2020;66(5):162-8.
17. Keshavarz Shahbaz S, Varasteh AR, Koushki K, Ayati SH, Mashayekhi K, Sadeghi M, et al. Sublingual dendritic cells targeting by aptamer: Possible approach for improvement of sublingual immunotherapy efficacy. *Int Immunopharmacol.* 2020;85:106603.
18. Kamali Kakhki R, Aryan E, Meshkat Z, Sankian M. Development of a Cost-Effective Line Probe Assay for Rapid Detection and Differentiation of Mycobacterium Species: A Pilot Study. *Rep Biochem Mol Biol.* 2020;8(4):383-93.
19. Kabiri M, Tafaghodi M, Saberi MR, Moghadam M, Rezaee SA, Sankian M. Separation of the Epitopes in a Multi-Epitope Chimera: Helical or Flexible Linkers. *Protein Pept Lett.* 2020;27(7):604-13.
20. Hosseinpour M, Mashayekhi K, Falak R, Jamalzehi S, Mohammadian Haftcheshmeh S, Mousavi MJ, et al. Production and Characterization of Monoclonal Antibody against Vit v1: A Grape Allergen Belonging to Lipid Transfer Protein Family. *Iran J Allergy Asthma Immunol.* 2020;19(2):139-48.
21. Ariaee N, Sankian M, Varasteh A, Moghadam M, Jabbari F. Introducing a Stabilizer Formulation for Allergenic Mold Extracts. *Rep Biochem Mol Biol.* 2020;9(1):106-14.
22. Ariaee N, Sankian M, Varasteh A, Hosseinpour M, Jabbari F. Determining the Effect of Amino Acids on the Allergenic Activity of Pollen Extracts. *Rep Biochem Mol Biol.* 2020;8(4):394-400.
23. Yaghoubi Naei V, Sankian M, Moghadam M, Farshidi N, Ayati SH, Hamid F, et al. The Influence of Gamma Radiation Processing on the Allergenicity of Main Pistachio Allergens. *Rep Biochem Mol Biol.* 2019;7(2):150-5.
24. Vasiee A, Mortazavi SA, Sankian M, Yazdi FT, Mahmoudi M, Shahidi F. Antagonistic activity of recombinant Lactococcus lactis NZ1330 on the adhesion properties of Escherichia coli causing urinary tract infection. *Microb Pathog.* 2019;133:103547.
25. Najafi A, Tafaghodi M, Sankian M, Amini Y, Ghazvini K. Cloning, Expression, and Refolding of PPE17 Protein of Mycobacterium Tuberculosis as a Promising Vaccine Candidate. *Iran J Med Sci.* 2019;44(1):53-9.
26. Mansouritorghabeh H, Sankian M, Varasteh AR, Moghadam M, Khameneh B, Farid-Hosseini R, et al. Determination of Optimum Excipients for *Platanus orientalis* Pollen Extract by Accelerating Chemical Stability Test and Their Synergistic Effect. *Rep Biochem Mol Biol.* 2019;7(2):189-95.
27. Mansouritorghabeh H, Jabbari-Azad F, Sankian M, Varasteh A, Farid-Hosseini R. The Most Common Allergenic Tree Pollen Grains in the Middle East: A Narrative Review. *Iran J Med Sci.* 2019;44(2):87-98.
28. Mahmoodi M, Ayoobi F, Aghaei A, Rahmani M, Taghipour Z, Hosseini A, et al. Beneficial effects of *Thymus vulgaris* extract in experimental autoimmune encephalomyelitis: Clinical, histological and cytokine alterations. *Biomed Pharmacother.* 2019;109:2100-8.
29. Mahmoodi M, Amiri H, Ayoobi F, Rahmani M, Taghipour Z, Ghavamabadi RT, et al. Carvacrol ameliorates experimental autoimmune encephalomyelitis through modulating pro- and anti-inflammatory cytokines. *Life Sci.* 2019;219:257-63.

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31. Kakhki RK, Neshani A, Sankian M, Ghazvini K, Hooshyar A, Sayadi M. The short-chain dehydrogenases/reductases (SDR) gene: A new specific target for rapid detection of *Mycobacterium tuberculosis* complex by modified comparative genomic analysis. *Infect Genet Evol.* 2019;70:158-64.
32. Hajavi J, Hashemi M, Sankian M. Evaluation of size and dose effects of rChe a 3 allergen loaded PLGA nanoparticles on modulation of Th2 immune responses by sublingual immunotherapy in mouse model of rhinitis allergic. *Int J Pharm.* 2019;563:282-92.
33. Hajavi J, Esmaeili SA, Varasteh AR, Vazini H, Atabati H, Mardani F, et al. The immunomodulatory role of probiotics in allergy therapy. *J Cell Physiol.* 2019;234(3):2386-98.
34. Farshidi N, Moghaddam M, Yaghoubi V, Ayati SH, Varasteh AR, Sankian M. Type IV chitinase quantification in four different grape cultivars (*Vitis vinifera*) in northeast of Iran by an indirect sandwich enzyme-linked immunosorbent assay. *J Immunoassay Immunochem.* 2019;40(2):139-48.
35. Ariaee N, Varasteh A, Jabbari Azad F, Sankian M. Preparation allergenic pollen extracts; the points should be considered to make high-quality products. *J Immunoassay Immunochem.* 2019;40(1):26-39.
36. Amiri Tehranizadeh Z, Sankian M, Fazly Bazzaz BS, Chamani J, Mehri S, Baratian A, et al. The immunotoxin activity of exotoxin A is sensitive to domain modifications. *Int J Biol Macromol.* 2019;134:1120-31.
37. Sedghy F, Varasteh AR, Sankian M, Moghadam M. Interaction Between Air Pollutants and Pollen Grains: The Role on the Rising Trend in Allergy. *Rep Biochem Mol Biol.* 2018;6(2):219-24.
38. Neshani A, Kamali Kakhki R, Sankian M, Zare H, Hooshyar Chichaklu A, Sayyadi M, et al. Modified genome comparison method: a new approach for identification of specific targets in molecular diagnostic tests using *Mycobacterium tuberculosis* complex as an example. *BMC Infect Dis.* 2018;18(1):517.
39. Kabiri M, Sankian M, Sadri K, Tafaghodi M. Robust mucosal and systemic responses against HTLV-1 by delivery of multi-epitope vaccine in PLGA nanoparticles. *Eur J Pharm Biopharm.* 2018;133:321-30.
40. Kabiri M, Sankian M, Hosseinpour M, Tafaghodi M. The novel immunogenic chimeric peptide vaccine to elicit potent cellular and mucosal immune responses against HTLV-1. *Int J Pharm.* 2018;549(1-2):404-14.
41. Havakhah S, Sankian M, Kazemzadeh GH, Sadri K, Bidkhorri HR, Naderi-Meshkin H, et al. In vivo effects of allogeneic mesenchymal stem cells in a rat model of acute ischemic kidney injury. *Iran J Basic Med Sci.* 2018;21(8):824-31.
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43. Ghasemi Z, Varasteh AR, Moghadam M, Sedghi F, Jabbariazzad F, Sankian M. Production of Recombinant Protein of *Salsola Kali* (Sal k1) Pollen Allergen in *Lactococcus Lactis*. *Iran J Allergy Asthma Immunol.* 2018;17(2):134-43.
44. Ghasemi Z, Varasteh AR, Moghadam M, Jalali SA, Anissian A, Sankian M. Sublingual Immunotherapy with Sal k1 Expressing *Lactococcus lactis* Down-regulates Th2 Immune Responses in Balb/c Mice. *Iran J Allergy Asthma Immunol.* 2018;17(3):281-90.

45. Beihaghi M, Marashi H, Bagheri A, Sankian M. Transient expression of CCL21as recombinant protein in tomato. *Biotechnol Rep (Amst)*. 2018;17:10-5.
46. Amini Y, Tafaghodi M, Amel Jamehdar S, Meshkat Z, Moradi B, Sankian M. Heterologous Expression, Purification, and Characterization of the HspX, Ppe44, and EsxV Proteins of *Mycobacterium tuberculosis*. *Rep Biochem Mol Biol*. 2018;6(2):125-30.
47. Alipour F, Jalali M, Nikravesh MR, Fazel A, Sankian M, Khordad E. Assessment of sperm morphology, chromatin integrity, and catSper genes expression in hypothyroid mice. *Acta Biol Hung*. 2018;69(3):244-58.
48. Shahdordizadeh M, Taghdisi SM, Sankian M, Ramezani M, Abnous K. Design, isolation and evaluation of the binding efficiency of a DNA aptamer against interleukin 2 receptor alpha, in vitro. *Int Immunopharmacol*. 2017;53:96-104.
49. Sedghy F, Sankian M, Moghadam M, Ghasemi Z, Mahmoudi M, Varasteh AR. Impact of traffic-related air pollution on the expression of *Platanus orientalis* pollen allergens. *Int J Biometeorol*. 2017;61(1):1-9.
50. Salehipour Z, Haghmorad D, Sankian M, Rastin M, Nosratabadi R, Soltan Dallal MM, et al. Bifidobacterium animalis in combination with human origin of *Lactobacillus plantarum* ameliorate neuroinflammation in experimental model of multiple sclerosis by altering CD4+ T cell subset balance. *Biomed Pharmacother*. 2017;95:1535-48.
51. Salari F, Vahedi F, Varasteh AR, Katabdar H, Chamani J, Sankian M. Enhanced sublingual immunotherapy by TAT-fused recombinant allergen in a murine rhinitis model. *Int Immunopharmacol*. 2017;48:118-25.
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55. Khademi F, Yousefi-Avarvand A, Derakhshan M, Meshkat Z, Tafaghodi M, Ghazvini K, et al. *Mycobacterium tuberculosis* HspX/EsxS Fusion Protein: Gene Cloning, Protein Expression, and Purification in *Escherichia coli*. *Rep Biochem Mol Biol*. 2017;6(1):15-21.
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58. Rezaee MA, Mohammadpour AH, Imenshahidi M, Mahmoudi M, Sankian M, Tsarouhas K, et al. Protective effect of erythropoietin on myocardial apoptosis in rats exposed to carbon monoxide. *Life Sci*. 2016;148:118-24.
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- encapsulated in liposome-protamine-DNA nanoparticles in a model of experimental allergy. *Immunol Res.* 2015;62(3):280-91.
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Awards:

The best Basic Medical Researcher of the year in Mashhad University of Medical Sciences (2008)

8. Abstracts in Scientific Meetings:

- Falak R, **Sankian M**, Tehrani M, Jabbari F, Abolhasani A, Varasteh A. Component-resolved diagnosis of grape allergy with purified natural allergens, *10th Iranian Congress of Immunology and Allergy, 18-20 May 2010, Tehran, Iran; indexed in Iranian J. of Immunology, 7 (Suppl. 1):14*
- **Mojtaba Sankian**, Hamid Reza Nouri, Abdol-Reza Nouri. Diagnosis of Chenopodium album allergy with a cocktail of recombinant allergens as a tool for

component-resolved diagnosis 30th EUROPEAN ACADEMY OF ALLERGY AND CLINICAL IMMUNOLOGY, 11-15 Jun 2011, Istanbul, Turkey

- Tehrani M, **Sankian M**, Jabbari, F, Assarehzadegan M, Falak R, Varasteh A. Molecular and Immunological Characterization of Amarr 2, an Allergen from *Amaranthus retroflexus*. *World Allergy Forum. 9th Congress EAACI. Warsaw. June 6-10, 2009.*
- Falak R, **Sankian M**, Tehrani M, Jabbari F, Abolhasani A, Varasteh A. IgE Binding Profile of Grape Extract in Grape Allergic Patients with Oral Allergy Syndrome. *World Allergy Forum. 9th Congress EAACI. Warsaw. June 6-10, 2009.*
- Falak R, **Sankian M**, Assarehzadegan MA, Tehrani M, Moghaddam M, Jabbari F, Abolhasani A, Varasteh AR. Proteomic Study of Grape Allergic Proteins. *Second Iranian Proteomics Congress, 23-24 Apr 2009, Tehran, Iran.*
- Tehrani M, Varasteh A, Khakzad MR, Mirsadraee M, **Sankian M**. Decreased levels of Soluble Toll-like Receptor 2 in Patients with Asthma. *9th Iranian Congress of Immunology and Allergy 2008. Tehran. Iran.*
- **Sankian M**, Varasteh A, Moghaddam M, Tehrani M. Disulfide Bridge of Two Conformationally Adjacent Cysteines: An Oxidative-response Modulator of Plant Profilin Conformation and Allergenicity. *9th Iranian congress of Immunology and Allergy 2008. Tehran. Iran.*

Publications (Books):

- Varaseh AR, **Sankian M**, Afsharian M, Samei M; The most common allergenic plant in Iran , Tehran , Iran, 2008 (Persian)

- Varaseh AR, **Sankian M**, Assarehzadegan MA; Western blot: Theory and Practice. Jahad Daneshgahi, Mashhad University, Mashhad, Iran, 2008 (Persian)
- One chapter in: Varasteh A, et al. Practical Immunology. Tehran: Peyvand Mehr Publishing (PMP), 2007 (Persian)

Since 2006, teaching and graduate student supervision has been a part of my official job responsibilities the University of Mashhad.

Current Supervisions at Mashhad University of Medical Sciences

1. Preparation of LPD nanoparticles containing Her2 peptides as vaccine against breast cancer 2009 (Advisor)
2. Investigation into the effectiveness of sublingual immunotherapy with the recombinant Tat-fused allergen (TAT-rPla or 3) from *Platanus orientalis* pollen and recombinant rPla or 3 entrapped into the PLGA nanoparticle in mouse experimental model. 2011
3. Production a hybrid protein of *Chenopodium Album* allergens and evaluation of immunogenicity effect in experimental model of allergy 2009
4. Identification, molecular characterization and production of recombinant form of grape allergens and evaluation of pesticide impact on expression and allergenicity of grape allergenic proteins. 2009
5. Production of monoclonal antibody against grape lipid transfer protein 2011
6. Production of probiotic food as a candidate for allergy immunotherapy 2010 (Advisor)

Previous Supervisions at Mashhad University of Medical Sciences

1. Gene expression profiling in patients with esophageal squamous cell carcinoma 2010(Advisor)
2. In vitro characterization of total tumoral-MRNA primed DC used in immunotherapy of esophageal squamous cell carcinoma (2009)
3. Identification, cloning and expression of allergens of the *Amaranthus retroflexus* pollen (2008)
4. Cloning and expression of Che a 2, an allergen of *chenopodium album* (2008)

5. Cloning expression and purification of a secretory antigen ESAT-6 of mycobacterium tuberculosis (2007) (Advisor)
6. Cloning and expression of Cuc m 1, a major allergen of Persian melon(2007)
7. Purification of natural profiling from Persian melon by immunoaffinity chromatography (2006)
8. Study of inflammasome pathway in macrophages cell line J774G8 infected by leishmania major, causing oriental sore (2008)
9. The effects of some salivary defense factors on severe early childhood caries (2011)
10. Evaluation of innate and acquired immune salivary proteins in children with severe early childhood caries and caries-free by microarray analysis (2009)
11. Evaluation of salivary immunoglobulin A level in patients with oral aplitha and its relation with clinical parameter (2009) (Advisor)
12. Identification, cloning, production of pistachio recombinant allergens and effects of heat processing on the allergenic properties of pistachio nut (2010) (Advisor)
13. Molecular study of L-ascorbic acid and insulin effects in prevention of apoptosis in hippocampus of type 1 diabetic rats (2006) (Advisor)
14. Cloning and expression of Cuc m 3, a major allergen of Persian melon (2007)
15. Molecular cloning, expression and purification of protein TB10.4 secreted by mycobacterium tuberculosis (2007) (Advisor)
16. Cloning and expression of M.tuberculosis major secreted protein antigen 85B (2007) (Advisor)
17. Cloning, expression and purification of a secretory antigen CFP-10 of mycobacterium tuberculosis(2007) (Advisor)
18. Identification, production and molecular characterization of the major allergen of Salsola kali pollen 2010
19. The effects of aerobic training on tumor necrosis factor-alpha,interferon-alpha, interleukin-2, interleukin-6 and leptin level in obese and lean men(2011)
20. Study of apoptotic effect echinococcus granulosus larval stage on lymphocytes (2007)
21. Comparative evaluation of streptococcus sobrinus and serotypes of streptococcus mutans in children with severe early childhood caries and caries-free using serotype-specific PCR (2010)

22. Gene expression profiling in patients with esophageal squamous cell carcinoma and its validation by real time PCR (2010) (Advisor)

عنوانین رساله های تحصیلی که به عنوان استاد راهنما یا مشاور هدایت نموده ام یا در حال انجام می باشند

شماره	عنوان	مقطع	سال اجرا	شماره	سمت	نام دانشجو
1	بررسی تاثیر IR و فاکتور رشد شبیه انسولینی IGF-IR دیابت مادری بر میزان رسپتور انسولین درهیپوکامپ جنین رت	آناتومی	1389-درحال اجرا		مشاور	جواد حامی
2	مطالعه هیستو شیمیابی و اینتوهیستوشیمیابی برخی گلیکوکانزوجیت ها و لامینین طی گنادوزنر در رت	ارشد آناتومی	1389-درحال اجرا		مشاور	فاطمه نیک مرد
3	بررسی تاثیر تجویز نیکوتین در دوره بارداری بر بیان لامینین و فیبرونکتین پارانشیم ریه نوزادان موش	آناتومی	1389-درحال اجرا		مشاور	مهری شریعتی کوه بنانی
4	بررسی اثر آلفا لیپوئیک اسید بر جلوگیری از تغییرات و لامینین در غشای پایه و ماتریکس IV بیان کلژن نوع خارج سلولی پری نوریوم عصب سیاتیک رت های دیابتیک	آناتومی	1389-درحال اجرا		مشاور	محمد رضا الداعی
5	بررسی اثر اریتروپویتین بر سمیت مغزی ناشی از مونوکسید کربن با بررسی پارامترهای سلولی و سرمی در رت	سم شناسی	1389-درحال اجرا		مشاور	شبم شاهسوند
6	بررسی اثر سیلایمارین در آسیب قلبی ناشی از تجویز تحت حاد آکرولئین در رت	سم شناسی	1389-درحال اجرا		مشاور	الله تقی آبادی
7	بررسی پروفایل بیان ژنی رده سلولی سرطان کولون در پاسخ به آنالوگ های جدید Caco-2 CDNA Microarray	پیوکنولوژی	1387-1390		مشاور	رضا انتظاری هروی
8	تولید آنتی بادی مونوکلونال برعلیه لیپید ترانسфер پروتئین انگور	ک. ارشد ایمونولوژی	1389-درحال اجرا		راهنما	طاهره حسین پور
9	در تشکیلات هیپوکامپ PSA-NCAM مطالعه میزان بیان نوزادان رت متولد شده از مادران ایپی لیتیک	آناتومی	1389-درحال اجرا		مشاور	علی اکبر رجب زاده
10	از مولکول ww2/ww3 تعیین اثرات دومن های نوترکیب Smurf2 در سلول RAW264.7 بر روی پیامدهای TGF-beta1	ک. ارشد ایمونولوژی	1389-درحال اجرا		راهنما	هانی مسیب زاده
11	ررسی اثر بخشی ایمونوتراپی با آرژن نوترکیب گرده چنان و 3 (TAT-rPla or 3) در دو حالت متصل به پیتید (ePla or 3) در مدل تجربی موشی PLGA محبوس شده در نانوپارتیکل	ایمونولوژی	1389-درحال اجرا		راهنما	فرهاد سالاری
12	انو پارتیکل مولتی فانکشنال طلا برای هدف گیری سلولهای انسفالیت اتوایمیون تجربی دندرتیتی و ارزیابی آن در درمان (EAE) در موشهای C57/BL6	ایمونولوژی	1389-درحال اجرا		راهنما	داریوش حق مراد
13	شناسایی، تولید و تعیین مشخصات مولکولی آرژن اصلی گرده گیاه تاج خروسی (Pigweed)	ایمونولوژی	1386-1389	آ-283	راهنما	محسن تهرانی

14	و بررسی اثر سوموم شناسایی، تولید و تعیین مشخصات مولکولی الژن های انگور Chenopodium album) تولید یک پروتئین هیرید از الژن های گرده گیاه سلمه کشاورزی بر الژنیسته آن	امونولوژی PhD	در حال انجام	-1387	-227-	راهنما	رضا فاک
15	بررسی ایمونوژنیسته آن در مدل تجربی الژنی C caries - free و بررسی مقایسه ای سروتیپ های استرپتوكوک های موتاوس و سوبوتیوس در کوکان تخصص دندانپزشکی	امونولوژی PhD	در حال انجام	-1387	-280-	راهنما	حمدی رضا نوری
16	بررسی عوامل ایندیکاتوری ذاتی بزاق کوکان دارای پوسیتیگی شدیده روشن میکرو او	امونولوژی PhD	1387-1388		1387-	راهنما	نیک الهام
17	بررسی عوامل ایندیکاتوری ذاتی بزاق کوکان دارای پوسیتیگی شدیده روشن میکرو او	امونولوژی PhD	1388-1387		1388-	راهنما	مینو رضایی فر
18	و ایجاد Salsola kali شناسایی، تولید و تعیین مشخصات مولکولی الژن اصلی گرده گیاه وارینه هیپو الژنیک آن به عنوان کاندیدی برای ایمونوتراپی اختصاصی	امونولوژی PhD	1386-1389	229-	-229-	مشاور	محمد علی عصاره زانگان
19	و اثرات Th17 تنظیمی و T3 با درصد سلول های D3 بررسی ارتباط سطوح سرمی و بتامین آن بر خصوصیات شبه سلطانی اندومترپوما	امونولوژی PhD	1387-	-282-	-282-	مشاور	علی اکبر بلبنی
20	تهیه نانوپارتیکل های حاوی پیتید به عنوان واکسن بر علیه سرطان پستان	امونولوژی PhD	1387-1390	281-	-281-	مشاور	امیر جلالی
21	mRNA به سلول های دندریتیک آلوده شده با توتال C لغفوسیت های in vitro بررسی پاسخ توموری چهت ایمونوگلوبولین	امونولوژی PhD	1383-1388	198-	-198-	مشاور	مهران غلامی
22	بزاقی در بیماران مبتلا به آفت دهانی و ارتباط آن با A شاخص های بالینی	امونولوژی PhD	1387-1388	2257	1387-	راهنما	حمید عباسزاده
23	آلژن اصلی خربزه مشهد CUC M1 کلونینگ و تولید آژن نوترکیب	امونولوژی PhD	1386-1387	225-	-225-	راهنما	فریده طالبی
24	آلژن حربزه 3 mCuc کلونینگ و تولید الژن	امونولوژی PhD	1387-1386	234-	-234-	راهنما	جهفر حاجی
25	بررسی اثر آپوپتیک مرحله لاروی کرم آکینتوکوس گرانولوزوس بر روی لغفوسیت ها	ک. ارشد انگل شناسی	1386-1387	247-	-247-	راهنما	عادل اسپوتن
26	بررسی مسیر اینفلامازوم در ماکروفاز های موشی رده سلولی آلوده به انگل لیشمانیا مازور	ک. ارشد انگل شناسی	1387-1386	248-	-248-	راهنما	مرضا محمودیان ثانی
27	مطالعه مولکولی اثرات ال-اسید اسکوربیک و انسولین در پیشگیری از آپوپتیزیس تاحیه هبیکامپ موش صحرابی دیابتی نوع 1	اناتومی PhD	1385-1387	221-	-221-	مشاور	ایرج جفری
28	تأثیر برخی از فاکتور های دفاعی بزاق بر پوسیدگی دندانی پیش رس شدید کوکان	امونولوژی PhD	1386-1385			مشاور	لیلا رضیانی
29	از مایکو باکتریو توبرکلوزیس-6 ESAT کلونینگ، بیان و تخلیص انتی ژن ترشحی میکروب شناسی	ک. ارشد	1387-1386	232-	-232-	مشاور	زهرا فرشاد زاده
30	از مایکو باکتریو توبرکلوزیس-10 CFP کلونینگ، بیان و تخلیص انتی ژن ترشحی میکروب شناسی	ک. ارشد	-13861387	231-	-231-	مشاور	فروغ یوسفی
31	از مایکو باکتریو توبرکلوزیس-4-10 TB Ag85B کلونینگ، بیان و تخلیص انتی ژن ترشحی میکروب شناسی	ک. ارشد	1387-1386	228-	-228-	مشاور	آیدا قلوبی
32	از مایکو باکتریو توبرکلوزیس-4-10 TB Ag85B کلونینگ، بیان و تخلیص انتی ژن ترشحی میکروب شناسی	ک. ارشد	1387-1386	227-	-227-	مشاور	رضا ظرفی
33	تشخیص حساسیت به خربزه: مقایسه الژن پروفیلین خربزه با نوع نوترکیب آن	ک. ارشد ایمونولوژی	1386-1387	236-	-236-	مشاور	یاسر باقری
34	تولید انتی بادی منوکلوتال علیه پروفیلین زغافان	ک. ارشد ایمونولوژی	1383-1384			مشاور	فروغ شیرازی

فعالیت های اجرایی

1. رییس هیات مدیره شرکت دانش بنیان پارس توس بیوتکنولوژی از سال 1387
2. مدیر توسعه فناوری دانشگاه علوم پزشکی مشهد از سال 1391
3. عضو شورای فناوری مرکز رشد فناوری دارویی و سلامت علوم پزشکی مشهد از سال 1392
4. دبیر کمیته حرکت به سمت دانشگاه کارآفرین نسل سه کلان منطقه 9 از سال 1396
5. عضو شورای پژوهشی دانشگاه علوم پزشکی مشهد از سال 1388

6. عضو کمیته ارزیابی شرکت های دانش بنیان پارک فناوری مشهد از سال 1393-1394

اختراعات

CHIMERIC PEPTIDES AGAINST HTLV-1

United States Patent Application 20180099042

جهت ایمونوتراپی و درمان سرطان (Nicotiana tabacum) انسانی در گیاه توتون CCL21 تولید پروتئین نوترکیب 1395

تولید کیت الیزا به منظور تشخیص سم دیازینون 1396

به همراه اتصال دهنده های فاقد انعطاف HTLV-1 طراحی و ساخت ساختار پروتئین کایمری از ایپتوپ های ایمنوزنیک 1395

فرآیند ساخت ساختار پروتئینی چندگانه از شاخص های ایمنی زای ویروس لنفوتروبیک سلول تی انسانی نوع یک به همراه اتصال دهنده های انعطاف پذیر 1395

References:

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