

Curriculum Vitae



Full Name: Dr. Zahra Zamani

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Address: Biochemistry Department, Pasteur Institute of Iran, Tehran, Iran.

Office Tel.: 98-21-66402770

Educational qualifications:

- 1.B.Sc. 1976 Institute of Science,Bombay University
- 2.M.Sc. 1982 Institute of Science,Bombay University
- 3.Ph.D. 1990 Haffkine Institute of Research,training and testing,Bombay University

Work experience:

Working as member of academic board of Pasteur Institute of Iran.

Associate Professor

Teaching Experience:

Teaching enzymology to Ph.D. students in Payame Noor University in Tehran since 2015.

Teaching Biophysics biochemistry to M.Sc. students in Payame Noor University in Tehran since 2015.

Teaching advanced biochemistry to Ph.D. students in Payame Noor University in Tehran since 2012.

Teaching advanced biochemistry to Ph.D. students in Pasteur Institute of Iran since 1995.

Teaching microbiology to M.Sc. students in Pasteur Institute of Iran since 2000.

Teaching protein chemistry to Ph.D. students in Pasteur Institute of Iran since 1995.

Grants obtained:

Collaborative Research on role of SNPS and Mutations in different GalNacs catalyzing ability to diverse mammalian proteins. 2005 -2009 EMGEN

COMSTECH Collaborative Research on Genetic variants of different stage specific antigen proteins can provide diverse glycosylation substrates acting as antigenicity determinant for vaccine against malaria-Glycosylation studies .in 2008-2009

Awarded the COMSTECH grant for "A collaborative proposal on research on structural and mechanistic studies of merozoite surface protein -1 (msp-1) for preparation of recombinant mspmalaria vaccine studies on the C-terminal portion." for the year 2006-2007.

Projects carried out:

1. An *invitro* study of synergy of Eosin B with artemisinin and pyrimethamine on gametocytes and sexual stage of *Plasmodium falciparum* *in vitro* in *Anopholes stephansii*. (Supervisor) 2015-
2. A metabonomic study of synergy of Eosin B with artemisinin and pyrimethamine *in vitro* and *in vivo* on *Plasmodium falciparum* and *Plasmodium berghii*. (Supervisor) 2014-2016
3. A study of cytotoxicity and biologic effect of 10 herbal extracts *in vitro* and *in vivo* on *Plasmodium falciparum* and *Plasmodium berghii*. (supervisor) 2015-2016
4. A metabonomic study on cupping using ¹HNMR. with traditional medicine center 2013-2014 (supervisor).
5. A metabonomic study of respiratory patients who have been effected by mustard gas 2010-2013 (supervisor).
6. . Metabolic profiling of diabetic type 2 patients using ¹HNMR (Co worker).
7. Metabolic profiling of leishmania major in two phases of log and static phase. (coworker).
8. . A metabonomic study of colon cancer patients using ¹HNMR. 2008 (Supervisor).

9. A preliminary study of early detection of immunization: a study based on an animal model using ^1H nuclear magnetic resonance spectroscopy. 2008.
10. A comparative study of glutathione s transferase enzyme in vivo and invitro with eosin, artemisine and chloroquine. 2007. (Supervisor).
11. Anti-leishmanial effects of trinitroglycerin in BALB/C mice infected with *Leishmania major* via nitric oxide pathway (Collaborator 2007).
12. A study of sequence diversity of the C-terminal region of *Plasmodium falciparum* merozoite surface protein 1 in southern Iran. 2006. (Supervisor).
13. A study of sequence diversity of the merozoite surface protein 1 region of *Plasmodium falciparum* in Iran.2005 (Supervisor).

Congress and symposium presentations:

1. Differentiation of colon cancer staging using ^1H NMR. 3rd Ciongress of novel and innovative laboratory techniques. 2015.
2. Preparation of supplement for cell culture medium from bovine serum I,. 3rd Ciongress of novel and innovative laboratory techniques. 2015.
3. Effect of Aoe vera extract on etabonomics of Raji cells by the use of ^1H NMR spectroscopy.
4. A study of the effect of Eosin B and artemisinin on metabolomics of ring stage of *Plasmodium falciparum in vitro* with the help of ^1H NMR. 3rd Congress of novel and innovative laboratory techniques. 2015.
5. A study of metabolic effect of cinnamon extract on cancer cells lymphoma by ^1H NMR. 3rd Ciongress of novel and innovative laboratory techniques. 2015.
6. An *invivo* study of combination therapy of Eosin B and artemisinin on *Plasmodium berghei* in mice., 16th International and Iranian Congress of Mircobiology. 2015
7. A metabolomics study of effect of combination therapy of eosin B ad artemisinin on sera of mice infected *invivo* using ^1H NMR spectroscopy.16th International and Iranian Congress of Mircobiology.2015
8. Metabolome profiling of ulcerative coitis by ^1H NMR spectroscop.6th Internaional Iranian congress laboratory and clinic.2014.
9. "Metabonomics". National conference of biological sciences, 2014.
10. Effect of cinnamon Extract on lymphoma Raji cells.Conference of herbal medicine. 2013.
11. Effect of clove extract onlymphoma cancer cells. Conference of herbal medicine. 2013.
12. A metabonomic study of the effect of turmeric extract on Raji cells *invitro*. 13th Iranian ongress of Biochemistry and 5th international congress of Biochemistry and Molecular biology. 2013.

13. Diagnosis colon polyps one of the gi diseases by ¹HNMR spectroscopy. 4th biennial chemometrics seminar 27-28 Nov. 2013.
14. Biologic effect of cinnamon. National e conference on advances in basic sciences and engineering. 2013.
15. Metabonomics assessment of clove extract on lymphoma cells in vitro by ¹HNMR spectroscopy. 4th Iranian biennial chemometrics seminar Nov. 2013.
16. Study of Cinnamon extract on *Plasmodium falciparum* *in vitro*. 1st international & 13th genetics congress of Iran. 2013.
17. . Differentiating between different colon diseases using ¹HNMR - Qazvin Biochemistry Congress Feb. 2011.
18. 2. A metabolomic study of polycystic ovary using ¹HNMR. Qazvin Biochemistry Congress Feb. 2011.
19. A metabolomic study of antimalarial artemisine on *Plasmodium falciparum* using ¹HNMR. Qazvin Biochemistry Congress Feb. 2011
20. Eosin B tested as new antimalarial drug- International Scientific meeting. Recent developments in malaria- poster- India, December 1-3, 2010.
21. Comprehensive metabonomic study of malaria parasite *Plasmodium falciparum* by ¹H Nuclear Magnetic Resonance spectroscopy- Abstract Book- Breakthroughs in plant, microbial and human biology, clinical and nutritional research and biomarker discovery- METABOLOMICS 2010, 27 June-1 July, 2010, AMSTERDAM THE NETHERLANDS.
- 22.. Serum levels of copper, zinc and iron in patients with cutaneous leishmaniasis in Qom province of Iran- 10th Iranian Congress of Biochemistry and 3rd International Congress of Biochemistry and Molecular Biology 16-19 November 2009, Tehran-Iran.
23. Evaluation of zinc, copper and iron levels as well as copper/zinc ratio in sera of cutaneous leishmaniasis patients before and after antimonial therapy- 10th Iranian Congress of Biochemistry and 3rd International Congress of Biochemistry and Molecular Biology 16-19 November 2009, Tehran-Iran
24. Study of glutathione S transferase enzyme activity in rodent and human malaria - 10th Iranian Congress of Biochemistry and 3rd International Congress of Biochemistry and Molecular Biology 16-19 November 2009, Tehran-Iran
25. Metabolism based diagnosis of beta thalassemia using ¹HNMR spectrum of human blood serum and linear vector quantization- Euromed lab Molecular diagnostics-2009.
- 26.. Study of glutathione-S-transferase enzyme activity in rodent and human malaria- Abstracts -Euromed lab Molecular diagnostics-2009.
- 27.. Inborn errors of metabolism-glycoproteins- Abstracts- Symposium on Glycoproteins in health and diseases Glycoproteins in health and diseases.
28. A study of the C terminal region of merozoite surface protein 1-15. Abstracts-The first International congress on Health Genomics and Biotechnology November 24-26, 2007-Tehran, Iran.
29. A preliminary metabonomic study using ¹HNMR spectroscopy for pattern recognition between immunized and non immunized rabbits- Biomarkers Summit" September 2007 at Amsterdam, Netherlands.
30. Alteration of serum zinc, copper and iron as biomarkers in patients with cutaneous leishmaniasis in Markazi province of Iran- European biomarkers summit conference Biomarkers Summit Sept. 2007 Amsterdam,

Netherlands.

31. Biomarker analysis and prediction model on the basis of neural networks on a metabolomic study using ¹H NMR on two groups of rabbits- European biomarkers Summit September 2007 at Amsterdam, Netherlands.
32. Glutathione S transferase in Plasmodium falciparum a new drug target- Symposium on enzyme Nanochemistry, biochemistry, molecular biology and bioinformatics of enzymes- Abstracts- Haffkine Institute for training, research and testing 2006.
33. A preliminary study of allel variation of merozoite surface protein gene in Plasmodium falciparum in Sistan Baluchestan- Molecular approaches to Malaria- MAM 2004.
34. Production of FITC conjugated anti human antiglobuline. 7th Congress of Iranian Biochemistry 2002.
35. . Production of FITC conjugated IgG with FITC. 4th Congress of Iranian Biochemistry 1998.
36. Purification of peroxidase enzyme from horse radish. 4th Congress of Iranian Biochemistry 1998.
37. Detection of anti clotting factor in venom of Naja naja Central Asian cobra. Congress of Biochemistry 1994.
38. Study of Hepatitis C in carriers of hepatitis B . Congress of blood transfusion 1994.
39. Purification of HBs Ag antigen for Elisa kit .
40. Purification of hydatid cyst antigen Hamedan.
41. . Characterization of an antigen responsible for cell mediated immunity in *Salmonella typhi* Second international biennial conference of Pakistan society for microbiology- Abstracts-
42. . An epidemiological survey of brucellosis in Arak, a city in Iran-Second international biennial conference of Pakistan society for microbiology-
43. . Characterization of flagellar antigen of Borrelia microti and determination of its sensitivity and specificity by haemagglutination test- Second international biennial conference of Pakistan society for microbiology

Articles

1. The Effect of Aqueous Extract of Cinnamon on the Metabolome of Plasmodium falciparum Using ¹H NMR Spectroscopy. Parvazi S, Sadeghi S, Azadi M, Mohammadi M, Arjmand M, Vahabi F, Sadeghzadeh S, **Zamani Z**. J Trop Med. 2016;2016:3174841. doi: 10.1155/2016/3174841. Epub 2016 Jan 20.
2. Metabolomics-Based Study of Logarithmic and Stationary Phases of Promastigotes in Leishmania major by ¹H NMR Spectroscopy. Arjmand M, Madrakian A, Khalili G, Najafi Dastnaee A, **Zamani Z**, Akbari Z. Iran Biomed J. 2016;20(2):77-83. Epub 2015 Nov 23. PMID:26592771.
3. Serum Metabolomic Profiling of Sulphur Mustard-Exposed Individuals Using ¹H Nuclear Magnetic Resonance Spectroscopy. **Zamani Z**, Ghanei M, Panahi Y, Arjmand M, Sadeghi S, Mirkhani F, Parvin S, Salehi M, Sahebkar A, Vahabi F. Basic Clin Pharmacol Toxicol. 2016 Jan;118(1):77-82. doi: 10.1111/bcpt.12441. Epub 2015 Jul 31. PMID:26177671.
4. A Metabolomic Study of the Effect of Methanol Extract of Ginger on Raji Cells Using ¹H NMR Spectroscopy. Parvizzadeh N, Sadeghi S, Irani S, Iravani A,

- Kalayee Z, Rahimi NA, Azadi M, **Zamani Z**. *Biotechnol Res Int*. 2014;2014:572534. doi: 10.1155/2014/572534. Epub 2014 Dec 28. PMID:25610655.
5. Effect of trinitroglycerin therapy on serum zinc and copper levels and liver enzyme activities in BALB/c mice infected with *Leishmania major* RHO/IR/75/ER. Najafzade M, Mosapour A, Nahrevanian H, **Zamani Z**, Javadian S, Mirkhani F. *Iran J Basic Med Sci*. 2015 Mar;18(3):277-83. PMID:25945241.
 6. NMR-based metabonomics survey in rats envenomed by *Hemiscorpius lepturus* venom. Arjmand M, Akbari Z, Taghizadeh N, Shahbazzadeh D, **Zamani Z**. *Toxicol*. 2015 Feb;94:16-22. doi: 10.1016/j.toxicol.2014.12.003. Epub 2014 Dec 3. PMID:25478805.
 7. A metabolic study on colon cancer using (1)h nuclear magnetic resonance spectroscopy. **Zamani Z**, Arjmand M, Vahabi F, Eshaq Hosseini SM, Fazeli SM, Irvani A, Bayat P, Oghalayee A, Mehrabanfar M, Haj Hosseini R, Tashakorpour M, Tafazzoli M, Sadeghi S. *Biochem Res Int*. 2014;2014:348712. doi: 10.1155/2014/348712. Epub 2014 Aug 14. PMID 25202454.
 8. Antiplasmdial activity of ethanolic extracts of some selected medicinal plants from the northwest of Iran. Hdi Sangia, Hossein Faramarzi, Alireza Yazdinezhad, Seyed Javad Mousavi, **Zahra Zamani**, Maryam Nobarani and Ali Ramezani. *Parasitolgy Research* . Aug. 2013. Doi: 10.007/s00436-01-3555-4.
 9. Homocysteine Induces Heme Oxygenase-1 Expression via Transcription Factor Nrf2 Activation in HepG2 Cell. Mani M, Golmohammadi T, Khaghani S, **Zamani Z**, Azadmanesh K, Meshkini R, Pasalar P. *Iran Biomed J*. 2013 Apr;17(2):93-100.
 10. Efficacy of eosin B as a new antimalarial drug in a murine model. **Zamani Z**, Tafreshi AS, Nahrevanian H, Lame-Rad B, Pourfallah F, Eslamifar H, Sadeghi S, Vahabi F, Irvani A, Arjmand M. *Malar Res Treat*. 2012;2012:381724. doi: 10.1155/2012/381724. Epub 2012 Dec 16.
 11. . A metabolomic study on the effect of intravascular laser blood irradiation on type 2 diabetic patients. Kazemi Khoo N, Irvani A, Arjmand M, Vahabi F, Lajevardi M, Akrami SM, **Zamani Z**. * *Lasers Med Sci*. 2013 Jan 29. [Epub ahead of print]
 12. Evaluation of serum levels of essential trace elements in patients with pulmonary tuberculosis before and after treatment by age and gender. Pourfallah F, Javadian S, **Zamani Z**, Saghiri R, Sadeghi S, Zarea B, Mirkhani F, Fatemi N, Kordi T. *Pak J Biol Sci*. 2011 15;14(10):590-4.
 13. O-GlcNAc modification of the anti-malarial vaccine candidate PfAMA1: in silico-defined structural changes and potential to generate a better vaccine. Uddin N, Hoessli DC, Butt A, Kaleem A, Iqbal Z, Afzal I, Muhammad Hammad, **Zamani Z**, Shakoori AR. *Mol Biol Rep*. 2012 Apr;39(4):4663-72. doi: 10.1007/s11033-011-1258-4. Epub 2011 Oct 22.
 14. Early detection of immunization: a study based on an animal model using 1H nuclear magnetic resonance spectroscopy. **Zamani Z**, Arjmand M, Tafazzoli M, Gholizadeh A, Pourfallah F, Sadeghi S, Mirzazadeh R, Mirkhani F, Taheri S, Irvani A, Bayat P, Vahabi F. *Pak J Biol Sci*. 2011 Feb 1;14(3):195-203.
 15. Search for novel antifungals from 49 indigenous medicinal plants: *Foeniculum vulgare* and *Platycladus orientalis* as strong inhibitors of aflatoxin production by *Aspergillus parasiticus*. Soheil Alinezhad & Azizollah Kamalzadeh & Masoomeh Shams-Ghahfarokhi & Mohammad-Bagher Rezaee & Kamkar Jaimand & Masanobu Kawachi, **Zahra Zamani**, Reza Tolouei & Mehdi Razzaghi-Abyaneh . *Ann Microbiol* (2011) 61:673–681 DOI 10.1007/s13213-010-0194-1.
 16. CREB in long-term potentiation in hippocampus: role of post-translational modifications studies in *silico*. Kaleem A, Hoessli DC, Haq IU, Walker-Nasir E, Butt A, Iqbal Z, **Zamani Z**, Shakoori AR; Nasir-ud-Din. *J Cell Biochem*. 2011 Jan;112(1):138-46. doi:

10.1002/jcb.22909

17. Nuclear magnetic resonance-based screening of thalassemia and quantification of some hematological parameters using chemometric methods.. Arjmand M, Kompany-Zareh M, Vasighi M, Parvizzadeh N, **Zamani Z**, Nazgooei F. *Talanta*. 2010 Jun 15;81(4-5):1229-36. doi: 10.1016/j.talanta.2010.02.014. Epub 2010 Feb 16.
18. Anti-leishmanial effects of trinitroglycerin in BALB/C mice infected with *Leishmania major* via nitric oxide pathway. Nahrevanian H, Najafzadeh M, Hajihosseini R, Nazem H, Farahmand M, **Zamani Z**. *Korean J Parasitol*. 2009 Jun;47(2):109-15. doi: 10.3347/kjp.2009.47.2.109. Epub 2009 May 27.
19. Sequence diversity of the C-terminal region of Plasmodium falciparum merozoite surface protein 1 in southern Iran. **Zamani Z***, Razavi MR, Sadeghi S, Naddaf S, Pourfallah F, Mirkhani F, Arjmand M, Feizhaddad H, Rad ME, Tameemi M, Assmar M. *Southeast Asian J Trop Med Public Health*. 2009 Jan;40(1):1-9. Erratum in: *Southeast Asian J Trop Med Public Health*. 2009 May;40(3):644. Ebrahimi Rad
20. Evaluation of serum levels of zinc, copper, iron, and zinc/copper ratio in cutaneous leishmaniasis. Pourfallah F, Javadian S, **Zamani Z**, Saghiri R, Sadeghi S, Zarea B, Faiaz Sh, Mirkhani F, Fatemi N. *Iran J Arthropod Borne Dis*. 2009;3(2):7-11. Epub 2009 Dec 31
21. A preliminary study of genetic diversity of MSP-1 types in Plasmodium falciparum in southern province of Sistan Baluchistan of Iran. **Zahra Z.***, Reza RM, Mehdi A, Sedigheh S, Fatemeh P, Nikoo N, Ashraf S, Mohammad R. *Pak J Biol Sci*. 2007 Feb 1;10(3):368-72.
22. Removing peroxide impurities from ether improves the quality of globin chains for biosynthetic studies. Mirzazadeh R, Khatami S, Bayat P, **Zamani Z**, Sadeghi S, Roohi S, Saidi P. *Hemoglobin*. 2005;29(2):161-4.
23. Effect of physical activity on plasma metabolomics variation using ¹H NMR, anthropometric and modeling methods Mohammad Arjmand¹, Fatemeh Darvizeh², Ziba Akbari¹, Reyhaneh Mohabati¹ and **Zahra Zamani*** *Journal of Bioinformatics and Sequence Analysis* Vol. 4(1), pp. 1-8, October 2012
24. Purification of periplasmic flagellar antigen from *Borrelia microtti*. Assmar M, Soleimani M, Oreiz F, Piazak N, Hossini SM, Saghiri R, **Zamani Z**. *Scand J Infect Dis*. 2002;34(4):267-72
25. Preparation of a new medium for invitro culture of *Borrelia microtti* and *Borrelia Persica*. Mehdi Assmar, Mhammd Sleimani, Noorair Pazak, Farzad Oreizi, Seyed Hossein Hossini, **Zahra Zamani**. *Medical journal of Islamic Republic of Iran*, **2002; 15 (4) :227-230**.
26. A Metabonomic Study on Samples of Cutaneous Leishmaniasis and its Correlation with the Selenium Level in the Blood Serum Tafazzoli Mohsen, Fathi Fariba¹, Darvizeh Fatemeh, **Zahra Zamani** and Pourfallah Fatemeh. <http://dx.doi.org/10.4172/2155-9929.1000101>.
27. Characterization of an anticoagulant agent in the venom of Iranian cobra (*Naja naja oxiana*) **Z. Zamani ***, H. Zolfagharian, Towfighi, S. Khatami, and A. ansari *Medical Journal of the Islamic Republic of Iran* Vol 13 Number 4 Winter 1378 February 2000.
28. Khatami S., **Zamani Z.**, Hosseini F and Aslani M.M. (2001) Comparison of 11 selective media for streptolysin O production by group A beta-hemolytic streptococci (Richard strain). *Hakim*, 4 (3)193-200.
29. Purification of protein F from outer membrane of *Pseudomonas aeruginosa*. *Basic Medical Sciences in Iran*, vol.2, No.1,39-42 Spring 1999.
30. Study of immunogenicity of plasma vaccine B prepared in Iran. *Scientific medical journal* No.27, winter 1998,
- 31.

Purification of peroxidase enzyme from *Raphaneus sativa*, Shaheed Sadooghi medical

university of Yazd, 63-68, Feb.1999.

GENEBANK ENTRIES

ABQ52496, ABQ52497, ABQ52498, ABQ57306, ABQ52495, ABM54034, BAA77608

Patent

1. National patent for preparation of Pastomax.2014
2. National Patent for preparation of solid medium for preservation of microorganisms.
3. National patent for kit for recognition of human blood on cloth fibres. 2011.

Thesis guided

1. M.Sc. thesis on "Effect of cinnamon extract on *Plasmodium falciparum* in vitro and in vivo on *Plasmodium falciparum* " Azad University 2015.
2. M.Sc. thesis "Study of aloe vera cells on the metabolome of Raji cells using 1HNMR spectroscopy. Payame Noor University 2015.
3. M.Sc. thesis Study of effect of combination of Eosin B and artemisinin on P.berghie in vivo using 1HNMR spectroscopy. Payame Noor university 2015.
4. M.Sc. thesis Study of effect of combination drug of Eosin B and artemisinin on P. falciparum in vitro using 1HNMR spectroscopy. Azad University 2015.
5. M.Sc. thesis Study of effect of intra venous red low level laser light on diabetes type 2 patients.
6. MSc thesis on metabolomics effect of Malvia Sylvesterius and Sampacus Ebulus on Raji cells" Azad University 2013.
7. MSc thesis on "metabonomic effect of cinnamon on Raji cells." Azad University 2013.
8. MSc thesis on "metabolomics effect of clove oil on Raji cells" Azad University 2013.
9. MSc thesis on "metabolomics effect of combination therapy with eosin on *Plasmodium falciparum* trophozoite stage in vitro "Payame Noor University 2012.
10. MSc thesis on effect of "combination therapy with eosin on *Plasmodium falciparum* ring stage in vitro" Payame Noor University 2012.
11. MSc thesis on "Effect of turmeric on metabolomics of Raji cells "Azad University 2012.
12. MSc thesis on "Metabonmics of ginger on glycoproteins of Raji cells" Payame Noor University 2012.
13. MSc. thesis on "Study of ginger on glycoproteins of Raji cells" Payame Noor univeristy 2012.
- MSc. thesis on "Study of glycosylation of AMA1 antigen in *Plasmodium falciparum*" Payame Noor University 2012.
14. MSc. thesis on "Study of glycsylation of AMA1 anigen in *Plasmodium falciparum*" Payame Noor University 2012.
- 15 MSc. Thesis on " Study of heavy metals of cpper, lead and iron and relative ratio of Cu/Zn in tserum levels of tubrclosis patients." Payame Noor University 2010.
16. MSc thesis in "Study of new anti malarial drugs using GST enzyme as a drug target." Payam University 2010
17. MSc thesis on " standardization of 1HNMR spectroscopy on serum of colon cancer patients." Payam University 2010.
18. M.Sc. thesis "Metabonomic study of . Study of lead, cu Leishmaniosis using 1HNMR

spectroscopy." Sharif university.

19. M.Sc. Thesis "Standardization of ¹HNMR spectroscopy by ¹HNMR spectroscopy." Sharif university.

20. MSc thesis in biochemistry "study of allelic variations in amino acids of merozoite surface proteins in *Plasmodium falciparum*" Al Zahra University.

21. MSc. Thesis in biochemistry : Purification of anticlotting factor in venom of Iranian cobra *Naja naja oxiana*" Iranian Medical University 1998.

22. Doctor in Pharmacy: Purification of peroxidase enzyme from Iranian radish *Raphanus sativa* " Mashhad Azad University 1997.

23. Doctor in Pharmacy "Study of cell mediated immunity in *Salmonella typhi*" Azad university 1998.

24. Doctor in Pharmacy "Preparation of anti human immunoglobulin conjugated with FITC "Azad University 1999.

Co guide for:

1. Ph.D. thesis Study of effect of low level laser light on diabetes type 2 patients and comparison of expression of VEGF, EGF, FGF, PDGF genes and tissue repair in diabetic wounded mice in fibroblast analogue culture with and without low level laser light.
2. Ph.D. thesis on "Study of effect of homocysteine in expression and level of homocysteine oxidase 1 glutamate (HCO) cysteine lyase (GLC) and Nrf2 after oxidation and change in glutathione on HepG2 cells. Tehran University 2013.
3. MSc thesis on " Study of metabolic profile *Leishmania major* in the log and stationary phase using ¹HNMR" Azad University 2012.
4. MSC thesis on "Study of metabolic profile of effect of Iranian artemisinin on *Plasmodium falciparum* in vitro using ¹HNMR" Azad University 2012.
5. MSC thesis on "Study of metabolic profile of ring stage of *Plasmodium falciparum* using ¹HNMR" Payame Noor University 2011.
6. MSC thesis on "Study of effect of toxic fraction of *Haemscorpius lepturus* on serum metabolic profiles using ¹HNMR. " Payame Noor University 2011.
7. . MSC thesis on "Study of metabolic profile of ring stage of *Plasmodium falciparum* using ¹HNMR" Payame Noor University 2010.
8. MSC thesis on "Study of metabolic profile on rheumatoid arthritis with the help of ¹HNMR and metabolomics: Payame Noor University 2010.
9. "MSC thesis on "Investigation of pattern regulation between normal and leishmania patient sera and their correlation with selenium using ¹HNMR " Azad University 2009.
10. MSC thesis on "Investigation of standard method for NMR based metabolomic study Sharif University of Technology Sept 07
11. MSc thesis in Biochemistry "A study of TNG as drug on mouse malaria." Pasteur Institute 2008
12. M.Sc. Thesis in microbiology "Purification of periplasmic flagella in *Borrelia microti*" Pasteur Institute 2001.
13. M.Sc. thesis in Microbiology "Purification of periplasmic flagella in *Borrelia persica*" Pasteur Institute 2001.
14. Doctor in Medical lab technology "Preparation of an ELISA kit for hydatid cyst antigen" Azad University 1997.
15. Doctor in Medical Lab technology "Preparation of an IHA kit for hydatid cyst antigen "Azad University 1997.
16. Doctor in Pharmacy : "Study of cell mediated immunity in borreliosis".

Executive posts:

Manager of Fartak Ebtekar Company (biotechnological company) producing kits for for recognition of human blood on cloth fibres for coroners.

Head of International Relations of Pasteur Institute of Iran Tehran, Iran.2009 upto present.

Head of Public and International Relations of Pasteur Institute of Iran Tehran, Iran 2009-2013.

Head of Biochemistry Department 1992- 1995.

Extracurricular activities:

Exponent of yoga and love walking and mountaineering.