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## **QUALIFICATION:**

**PhD:** Medical Parasitology (Pasteur Institute of Iran)

**M.S. P.H.:** Medical parasitology (Tehran University of Medical Science)

**B. Sc.:** Biology (Tehran University of Medical Science)

### **Theses /Advisor:**

- 1997**      The evaluation of the *in vitro* and *in vivo* antileishmanial activity of Vinca species
- 1999**      The evaluation of toxoplasmosis in immunodeficient patients
- 2005**      The evaluation of *Dorema ammuniacum* in *Leishmania major* In vitro
- 2011**      In vivo and in vitro investigation on anti-leishmanial efficacy of artemisinin in comparison with glucantim on endemic strain of *Leishmania major*

## PROJECT

### Principal Investigator (PI)

1-An investigation on A2 proteins from cultured amastigots and promastigots of *Leishmania infantum* from endemic areas of Iran and comparison with those in *L. donovani* & *L. chagasi*

2- Genetic analysis of A2 protein in *L. infantum* & *L. major* in endemic areas of Iran

### Co- investigator (Co-I)

1- Study of protectivity of penetration enhancing factor (PEF) of *Toxoplasma gondii* in animal model.

2- The evaluation of the *in vitro* and *in vivo* antileishmanial activity of *Vinca* species.

3- Identification of common species of *Leishmania* in Iran by molecular methods (PCR).

4- The evaluation of therapeutic effects of *Vincas* alkaloids on *Leishmania major*.

5-Determination of the rate of fetal death due to *Toxoplasma*, using standard techniques & PCR in hospitalised women for abortion in health centers of Mazandaran.

6- The survey of immunogenicity of inactive *Toxoplasma gondii* in animal model.

7-Single strand conformational polymorphism analysis of various species of humans *Plasmodium* in Iran.

8-PCR-detection of different species of *Plasmodium* in malaria vectors prevailing in endemic area of Iran.

9 -The evaluation of anti-leishmanial activity of In vivo administration of selective nitric oxide inducer & nitric oxide donor on *L.major* in animal model.

10-Investigation on nitric oxide levels as a novel immunological target in malaria infected patients in endemic areas of Iran.

11-Inoculation of Cryptosporidium parasite into immunosuppressed animals for isolation of endemic strains & evaluation of antigenic proteins

12- Simultaneous genetics study of sand flies populations & related infective leishmania species by using genetic markers & sequences analysis in Agha Ali Abbas region.

13-Investigation on immunopharmacological effects of acetyl salicylic acid (ASA) and its antioxidant role *via* nitric oxide (NO) pathway on Balb/c mice infected with *Leishmania major* Department of Parasitology, Pasteur Institute of Iran

14-Molecular epidemiology of zoonotic cutaneous leishmaniasis in endemic foci of Golestan province

## TRAINING COURSES

1- Cultivation of cell lines for maintenance and immunological studies of *Toxoplasma gondii*.

2-Continuous culture of *Plasmodium falciparum* for the molecular and biochemical Studies

3-Cultivation and maintenance of *Leishmania* species for production of antigenic material and evaluation of the antileishmanial activity of plant extracts.

4- Axenic culture of *Entamoeba histolytica* trophozoites (TY1-S-33 medium) and *Trichomonas vaginalis*.

5- Diagnosis of parasites by direct and serological methods.

### **WORKSHOPS ATTENDED**

1-Two dimensional electrophoresis and its applications in proteomics. 2004  
Pasteur institute of IRAN. Biotechnology research center

2-The first joint work shop on laser micro dissection 25-26 June 2005, Cancer  
institute of I.R.IRAN

### **MEMBERSHIP OF PROFESSIONAL SOCIETY**

Iranian Society for Parasitology (**ISP**)

Iranian Society for Biotechnology (**ISB**)

### **SKILLS**

**Language:** Farsi (native), English (fluent).

## PUBLICATIONS

- 1- **Farahmand M.** Microsporidian Entrocytozoon bienersi in Aids patients. *Gashtag*, 1995, 2(5):25-26
- 2-**Farahmand M.**,Rezaian M.,Amirkhani A: Prevalence of Trichomoniasis in women attending family planning clinic by using culture media and direct methods in Tehran. *Medical and purification* 1996, 22, autumn
- 3-Assmar M,Mehrabian S,Piazak N,**Farahmand M.**The evaluation of the invitro antileishmanial activity of Vinca extract.*Iranian J. of Public Halthe*,1997,26(3-4):29-34
- 4-Assmar M. Hajizadeh Manjili M. Esmaeili A.R. **Farahmand M.** Piazak N: Immunogenicity of gamma-irradiated Toxoplasma gondii tachyzoites in mice. *Iranian Biomedical Journal* 1999;3(3&4):93-97
- 5- Assmar M. **Farahmand M.** Aghigi Z .Ghaemi N: Invitro and in vivo evaluation of therapeutic effects of *Vinca major* alkaloids on *Leishmania major*. *Journal of school of public health & Institute of public health researches* 2002; 1(2)
- 6-Assmar M. Ter hovanessian. Jahani M. Piazak N. **Farahmand M.** Zare M. Molecular epidemiology of malaria in endemic areas of Iran. *Southeast Asian J Trop Med Public Health* 2003; 34 (sup2)
- 7- Assmar M. et al. **Farahmand M.** The epidemiology of urban malaria in Parsabad-e-moghan,Iran .*International J of Anti mic agents* 2004 (24s) 124-252

- 8- Nahrevanian H. Gholizadeh J. **Farahmand M.** Aghigh Z. Reactive nitrogen intermediate production & tolerance variability in different mouse strains after in vivo treatment with lipopolysaccharid from *salmonella abortus equi*. *J. microbial immunol infect* 2005;38:164-168
- 9- Nahrevanian H. Gholizadeh J. **Farahmand M.** Assmar M. Sharifi K. Nitric oxide as a novel immunoepidemiological target in malaria patients from endemic areas of IR.Iran. *Scand.J.clin.lab.Invest.* 2006;66(3):201-209
- 10-Nahrevanian H. **Farahmand M.** Aghigi Z. Assmar M. Amirkhani A. Pharmacological evaluation of anti- leishmanial activity by invivo NO modulation in Balb /c mice infected with leishmania major MRHO/IR/75/ER; an Iranian strain of cutaneous leishmaniasis :*Experimental parasitology* 2007,115, 5
- 11- **Farahmand M.** Nahrevanian H. Assmar M. Mohebbali M. Zarei Z : Expression of A2 proteins in amastigotes of *Leishmania infantum* produced from canine isolates collected in the district of Meshkinshahr, in north–western Iran.: *Annals of Tropical Medicine and Parasitology*, 2008; 102(1) 81-84
- 12- Nahrevanian H. Gholizadeh J. **Farahmand M.** Assmar .M: Patterns of co-association of C-reactive protein and nitric oxide in malaria in endemic areas of Iran. : *Mem Inst Oswaldo Cruz.* 2008; Feb; 103(1):39-44
- 13- Parvizi P. Moradi GH. Akbari Gh. **Farahmand M.** Ready P. Piazak N: PCR detection and sequencing of parasite ITS-r DNA gene from reservoirs host of zoonotic cutaneous leishmaniasis in central Iran. *Parasitol Res* (2008)103:1273–1278

- 14- **Farahmand M.** Assmar M. Nahrevanian H. Farzanehnejad Z. PiazzaK N: Cutaneous leishmaniasis in patients referred to the Pasteur Institute of Iran during 2003-2006. *The Internet Journal of Parasitic Diseases*, 2008; 3(2):1-7.
- 15- Nahrevanian.H. Najafzadeh M. Hajihosseini R. Nazem H. **Farahmand .M** : Anti-leishmanial Effects of Trinitroglycerin in BALB/C Mice Infected with *Leishmania major* via Nitric Oxide Pathway, *Korean J Parasitol.* 2009 Jun; 47(2):109-115.
- 16- Davachi S. Nahrevanian H. Omidinia E. Hajihosseini R. Amini M. **Farahmand M.** Mirkhani F. Javadian S: Biochemical alterations of liver enzymes and microelements during *Leishmania major* infection in BALB/c mice after treatment with Paromomycin. *Pharmacology online*, 2009; 3: 424-436.
- 17- Nahrevanian H. Hajihosseini R. Arjmand M. **Farahmand M.** Ghasemi F: Evaluation of antileishmanial activity by induction of nitric oxide and inhibition of prostaglandin in Balb/c mice infected with *Leishmania major*. *Southeast Asian Journal of Tropical Medicine and Public Health*, 2009; 40(6):1188-1198.
- 18- Amini M. Nahrevanian H. Khatami S. **Farahmand M.** Mirkhani F. Javadian S: Biochemical association between the essential trace elements and susceptibility to *Leishmania major* in BALB/c and C57BL/6 mice. *Brazilian Journal of Infectious Diseases*, 2009; 13(2): 83-85.
- 19- Amini M. Nahrevanian H. **Farahmand M.** Khatami S. Mirkhani F. Javadian S: Immunobiochemical variation in susceptible BALB/c and resistant C57BL/6 mice infected with Iranian strain of cutaneous leishmaniasis; *Leishmania major* MRHO/IR/75/ER. *Internet Journal of Infectious Diseases*, 2009; 7(1): 1-4.

20- **Farahmand M**, Nahrevanian H, Atashi Shirazi H, Naeimi S, Farzanehnejad Z: An overview of diagnostic and epidemiologic reappraisal of cutaneous leishmaniasis in Iran. *Brazilian Journal of Infectious Diseases*, 2011; 15(1):17-21.

21- **Farahmand M**, Atashi Shirazi H, Nahrevanian H, Hajjarian H: Molecular analysis of A2-genes encoding stage-specific S antigen-like proteins among isolates from Iranian cutaneous and visceral leishmaniasis. *Iranian Journal of Basic Medical Sciences*, 2011; 15(1):17-21

22 - Nemati S, Jafary SP, Nahrevanian H, **Farahmand M**, Nahrevanian S. Immuno-biochemical alterations in *Leishmania major* infected Balb/c mice after immunization with Killed *Leishmania* Vaccine and BCG as adjuvant. *Current Research Journal of Biological Sciences*, 2012; 4(6): 706-712

**23 -Nahrevanian H**, Jalalian M, Farahmand M, Assmar M, Esmaeili Rastaghi AR, Sayyah M. Inhibition of murine systemic leishmaniasis by acetyl salicylic acid via nitric oxide immunomodulation. *Iranian Journal of Parasitology*, 2012; 6(2): 21-28

24 -Mohammadpour GH, Tahmasbpour Marzonyb E , **Farahmand M**. Evaluation of the Anti-*Leishmania major* Activity of *Satureja bakhtiarica* Essential Oil in vitro. *Natural Product Communications* Vol. 7 (1) 2012.

25 - Nahrvevanian H, Jafary SP, Nemati S, **Farahmand M**, Omidinia E. Evaluation of anti-leishmanial effects of Killed *Leishmania* Vaccine with BCG adjuvant in BALB/c mice infected with *Leishmania major* MRHO/IR/75/ER. *Folia Parasitologica*, 2013; 60(1): 1-6



26- Nemati S, Nahrevanian H, Haniloo A, **Farahmand M**. Investigation on nitric oxide and c-reactive protein involvement in anti-leishmanial effects of Artemisinin and Glucantim on cutaneous leishmaniasis. *Advanced Studies in Biology*, 2013; 5(1): 27-36.

27- Faezi F, Nahrevanian H, **Farahmand M**, Sayyah M, Bidoki SK, Nemati S, Naeimi S. Comparative application of three types of L-arginine as nitric oxide precursor for *in vivo* trial on leishmaniasis in Balb/c mice infected with *Leishmania major*. *Asian Pacific Journal of Tropical Medicine*, 2013;

28 - Mirzaei A , Rouhani S , Kazerooni PA , **Farahmand M**, Parvizi P.

Molecular Detection and Conventional Identification of Leishmania Species in Reservoir Hosts of Zoonotic Cutaneous Leishmaniasis in Fars Province, South of Iran. *Iranian J Parasitol: Vol. 8, No.2, Apr-Jun 2013, pp. 280-288*

29 - **Farahmand M**, Khalaj V, Mohebbali M, Khalili GH, Naderi S, Ghaffarinejad P and Nahrevanian H. Comparison of recombinant A2-ELISA with rKE16 dipstick and DAT test for diagnosis of visceral leishmaniasis in dogs in Northwestern Iran. *Revista da Sociedade Brasileira de Medicina Tropical* 48(2):188-193, 2015.

30 - P. Ghaffarinejad, **M. Farahmand**, H. Nahrevanian, M. Mohebbali, F. Zaboli, Z. Zarei, B. Akhoundi, M. Barati and F.S. Ghasemi. Diagnosis of *Leishmania infantum* using Direct Agglutination Test and rKE16 dipstick rapid test in domestic dogs from Ardabil province, Iran. *Research Journal of Parasitology* 10 (3): 102-110, 2015.

31- **Farahmand M** and Nahrevanian H. Application of recombinant proteins for serodiagnosis of visceral leishmaniasis in humans and dogs. *Iranian Biomedical Journal* 20(3): 128-134 July 2016.

32- **Farahmand M**, H. Nahrevanian, Khalaj V, Mohebbali M, Khalili GH, M Barati, Naderi S, Z Zarei. Assessment of recombinant A<sub>2</sub>-latex agglutination test (rA<sub>2</sub>-LAT) and rA<sub>2</sub>-ELISA for detection of canine visceral leishmaniasis: a comparative field study with direct agglutination test in northwestern Iran. *Iranian Journal of Parasitology*, 2017, **in press**.

## **SEMINARS & CONFERENCES**

1- Prevalence of Trichomoniasis in women attending family planning clinic in Tehran. The third Iranian congress of biochemistry & laboratory sciences 30 Sep 3 Oct 1995

2- Maintenance of *Toxoplasma Gondii* in BHK21 cell line. The 2th congress of parasitic disease in Iran, Tehran 27-30 Oct 1995.

3- Long term maintenance of *Toxoplasma gondii* (RH strain) in Vero cell line. XIVth international congress for tropical medicine and malaria new goals for the 21st Century, Nagasaki, Japan Nov. 17-22 1996.

4- Prevalence of *Trichomoniasis* in women attending family planning clinic in Tehran, The VII European multicolligium of parasitology, Parma, Italy 2-6 September 1996.

5- Existence of Gp63 in both life stages of *Leishmania major*, the ninth international congress of parasitology (ICOPA IX) August 24-28 1998 Chiba Japan.

6 -Epidemiological survey of malaria by molecular methods in endemic areas in Iran, The 2th congress of public health 15-18 Nov 2001.

7-Therapeutic effects of *Vincas* alkaloids on *leishmania major*. The 10<sup>th</sup> Iranian congress of infectious disease and tropical medicine, Tehran 5-9 Jan 2002

8-Molecular epidemiology of malaria diseases in endemic areas of Iran . Joint international tropical medicine meeting. Thailand 2002

9- Invitro evaluation of therapeutic effects of *Dorema ammoniacum* extraction *Leishmania major*. International meeting on antimicrobial chemotherapy in clinical practice (ACCP) Oct 16-19, 2003.

10-The evaluation of therapeutic effects of Pervansh extract and Glucantim drug on *leishmania major* promastigots in vitro . The 13<sup>th</sup> Iranian congress on infectious disease & tropical medicine 11-15 Des 2004

11- IX European Multicollequim of Parasitology (EMOPIX) Valencia,Spain 24 May 2004

12- 12<sup>th</sup> Iranian congress of Inf Dis and tropical Med 17-21 Jan 2004

The evaluation of therapeutic effect of chloroformic & ether extracts of *Dorema ammoniacum* on *leishmania major* invitro

13- 5<sup>th</sup> National Iranian congress of parasitology 15-17 Nov. 2005.

14-The 2<sup>th</sup> national congress of updates in dermatology disease & Leishmaniasis 29-30 Sep-2005 Isfahan-Iran

15- 4<sup>th</sup> National biotechnology congress, Kerman August 2005

16- 12<sup>th</sup> international congress of protozoology ICOPXII China July 10-15, 2005  
. CO-Association of C - reactive protein and Nitric Oxide induction in Malaria patients from Endemic provincial area of Iran.

17- The 1st Iranian seminar on immunity and infections 9-10 March 2005.

18- ICOPA XI- 11<sup>th</sup> international congress of parasitology 6-11 August 2006  
Glasgow, Scotland

19- First Iranian congress of proteomics, Tehran University 2 Esfand 1385

20- 5<sup>th</sup> European congress on tropical medicine & international Health 24-28. May  
2007 Amsterdam, the Netherlands

21- 1<sup>st</sup> international congress on health Genomics & Biotechnology 24-26 Nov.  
2007, Tehran, Iran, IPI.

22- X<sup>th</sup> European Multicolloquim of Parasitology from satellites to microsatellites  
24-29 August 2008 Paris

23- 6<sup>th</sup> European congress on tropical medicine & international health 6-10 Sept,  
2009, Verona, Italy

24- A2 gene among isolates from Iranian cutaneous leishmania species. The XIIth  
International Congress of Parasitology (ICOPA 7), Aug 15–20, *Melbourne,*  
*Australia*, 2010; P-1116.

25- Evaluation of anti-leishmanial efficacy by *in vivo* administration of Artemisia  
auchery herbal extract on Leishmania major in balb/c mice. The XIIth International  
Congress of Parasitology (ICOPA 7), Aug 15–20, *Melbourne, Australia*, 2010; P-  
1828.

26- A2 gene among isolates from Iranian cutaneous leishmania species is highly conserved gene. (4th DICID), Jul 15–18, *Beijing International Convention Center, Beijing, China*, 2010; 14(S2):

27- Systemic leishmaniasis is inhibited by acetylsalicylic acid via nitric oxide pathway in *Leishmania major* infected susceptible Balb/c mice. The 3rd Ditan International Conference on Infectious Diseases (4th DICID), Jul 15–18, *Beijing International Convention Center, Beijing, China*, 2010; 14(S2): PL-008, S16.\

25-Application of recombinant A2-ELISA and its comparison with rKE16 dipstick and direct agglutination tests for diagnosis of visceral leishmaniasis in dogs in Meshkinshahr, north western, Iran . 25<sup>Th</sup> ECCMID, 25-28 April 2015. Copenhagen, Denmark.

### **Abstracts in Journals**

1- Assmar M, Raeisi A, Arshi SH, Razavi M, Naddaf SR, **Nahrevanian H**, Hovanesian A, **Farahmand M**, Ranjbar M: The epidemiology of urban malaria in Parsabad-e-Moghan, Iran. *International Journal of Antimicrobial Agents*, 2004; 24(S2): 509/88p; S175.

2- Nahrevanian H, Gholizadeh S J, **Farahmand M**, Abolhassani M, Assmar M: Investigation on nitric oxide induction as a novel immunological target in malaria infected patients from endemic areas of Iran. *International Journal of Antimicrobial Agents*, 2004; 24(S2): 512/88p; S176.

3- Amini M, Nahrevanian H, Khatami S, **Farahmand M**, Javadian S, Fayaz S, Mirkhani F: Biochemical evaluation of trace elements and liver enzymes during

*Leishmania major* infection in susceptible Balb/c and resistant C57bl/6 mice. *Archives of Iranian Medicine*, 2007; 10(4) Suppl1: S60.

4- **Farahmand M**, Nahrevanian H, Assmar M, Mohebbali M, Zarei Z: Identification of A2 proteins in *Leishmania infantum* from canine isolates of Meshkinshahr, northwestern Iran, *Tropical Medicine and International Health*, 2007; 12(S1): 255.

5- Nahrevanian H, Najafzadeh M, **Farahmand M**, Zamani Z, Hajihosseini R: Immunobiochemical evaluation of antileishmanial effects of trinitroglycerin as nitric oxide donor in BALB/C mice infected with *Leishmania major* MRHO/IR/75/ER. *Nitric Oxide, Biology & Chemistry*, 2008; 19(Suppl1): p62.

6- Nahrevanian H, Ghasemi F, Amini M, **Farahmand M**, Arjmand M, Hajihosaini R: Immunobiochemical evaluation of prostaglandin and nitric oxide in the physiopathology of Balb/c mice infected with *Leishmania major*. *Iranian J Parasitology*, 2008; 3(1) Suppl1: p59.

7- Amini M, Nahrevanian H, Khatami S, **Farahmand M**, Javadian S, Nahrevanian S: Evaluation of immunobiochemical responses of sensitive Balb/c and resistant C57bl/6 mice infected with *Leishmania major* MRHO/IR/78/ER. *Iranian J Parasitology*, 2008; 3(1) Suppl1: p7

8- **Farahmand M**, Nahrevanian H, Atashi Shirazi H, Naderi S: Molecular genetics of A2 proteins analysis from Iranian *Leishmania* species, *Journal of The Iranian Chemical Society*, 2009; 6(S1): P- 10-586-1, S209

9- Nahrevanian H, Eskandar Omidinia, Davachi S, **Farahmand M**, Amini M: Anti-leishmanial effects of paromomycin in both cutaneous and visceral forms of *Leishmania major* infection in Balb/c mice, *International Journal of Infectious Diseases*, 2009; 13(S1): PP-167, S94.

10- Nahrevanian H, **Farahmand M**, Amini M, M Arjmand, R Hajihosseini, F Ghasemi: Immunotherapy of cutaneous leishmaniasis by inhibition of

prostaglandin and induction of nitric oxide in susceptible Balb/c infected with *Leishmania major*, *International Journal of Infectious Diseases*, 2009; 13(S1): PP-168, S94.

11- **Farahmand M**, Atashi Shirazi H, Nahrevanian H: Molecular survey of A2 proteins in leishmania species from endemic areas in Iran, *Tropical Medicine and International Health*, 2009; 14(S1): 182-183.

12- Jafary SP, Nahrevanian H, Omidinia E, **Farahmand M**, Khalili G, Hosseini Z, Soleymani S: Immunobiochemical evaluation of killed leishmania vaccine (KLV) and BCG adjuvant in inhibition of visceralization of *Leishmania major* in Balb/c mice. *Iranian J Parasitology*, 2010; 5(S1): p54.

13- Salehizadeh E, Nahrevanian H, **Farahmand M**, Hajhosseini R, Alimohammadian MH, Saghiri R, Khalili G, Naeimi S: *In vivo* investigation of Killed Leishmania Vaccine's (KLV) efficacy with Imiquimod (IMQ) as adjuvant in inhibition of visceralization of *L. major* in Balb/c model. *Iranian J Parasitology*, 2010; 5(S1): p68

14- Farahmand M, Atashi Shirazi H, **Nahrevanian H**: A2 gene among isolates from Iranian cutaneous leishmania species is highly conserved gene. *International Journal of Infectious Diseases*, 2010; 14(S2): PP-201, S86.

15- Nahrevanian H, Jalalian M, **Farahmand M**, Esmaeili Rastaghi AR: Systemic leishmaniasis are inhibited by acetylsalicylic acid via nitric oxide pathway in *Leishmania major* infected susceptible Balb/c mice. *International Journal of Infectious Diseases*, 2010; 14(S2): PL-008, S16.

16- Nahrevanian H, Jalalian M, **Farahmand M**, Esmaeili Rastaghi AR, Assmar M, Sayyah M, Amini M: Acetyl salicylic acid inhibits systemic leishmaniasis via nitric oxide pathway in susceptible Balb/c model infected with *Leishmania major*. *Nitric Oxide, Biology & Chemistry*, 2010; 22.

- 17- **Farahmand M**, Shirazi HA, Nahrevanian H, Naeimi S: Evaluation of cutaneous leishmaniasis in patients referred to Pasteur Institute of Iran. *Tropical Medicine & International Health*. 2011;16(SI) Supp.1: 181.
- 18-Nahrevanian H, Nemati S, Haniloo A, **Farahmand M**, Fazaeli A: Anti-leishmanial effects of artemisinin in comparison with glucantim on *Leishmania major* in vitro. *Tropical Medicine & International Health*. 2011; 16(SI) Supp.1: 230.
- 19- Nahrevanian H, **Farahmand M**, Nahrevanian S, Ajdari S, Amini M, Ezzati Mirhashemi M: Isolation of cryptosporidiosis from different sources and its proliferation in experimentally immunosuppressed mice; representing of different variations. *Gut*, 2011; 60 (Suppl 3) A387, P1360.
- 20- Nemati S, Nahrevanian H, Haniloo A, **Farahmand M**, Fazaeli A: Investigation on anti-leishmanial effects of artemisinin in comparison with glucantim on *Leishmania major* in vitro. *International Journal of Infectious Diseases*, 2011; 15(S1): PP-187, S97.
- 21- Nahrevanian H, **Farahmand M**, Ajdari S, Amini M, E Mirhashemi M: Protein variations of *Cryptosporidium* spp. from different sources after proliferation in experimentally immunosuppressed mice. *International Journal of Infectious Diseases*, 2011; 15(S1): PP-173, S93.
- 22- Jafary SP, Nahrevanian H, Omidinia E, **Farahmand M**, Khalili G, Hosseini Z, Naeimi S: Immunobiochemical evaluation of killed leishmania vaccine (KLV) with BCG adjuvant for inhibition of visceralization of *Leishmania major* in Balb/c mice. *International Journal of Infectious Diseases*, 2011; 15(S1): PP-051, S59.
- 23- Salehizadeh E, Nahrevanian H, **Farahmand M**, Hajihosseini SR, Alimohammadian MH, Saghiri R, Naeimi S: In vivo investigation of Killed *Leishmania* Vaccine's (KLV) efficacy with Imiquimod (IMQ) as adjuvant in



inhibition of visceralization of *Leishmania major* in Balb/c model. *International Journal of Infectious Diseases*, 2011; 15(S1): OL-031, S25.

24- **Farahmand M**, Nahrevanian H, Khalaj V, Mohebbali M, Khalili GH, Naderi S. Comparison of rA2-Elisa with rKE16 dipstick and DAT in diagnosis of VL in dogs of Meshkin shahr, Ardabil province, north western Iran. *Iranian J parasitol. Sup Issue* 2015; 10(1).

## **TEACHING**

### **2007-2011**

- Teaching practical parasitology to students.

### **2007**

- Teaching practical parasitology to Pathology, infectious diseases residents
- Teaching practical parasitology to pharmaceutical biotechnology residents.

### **2006**

- Teaching practical parasitology to Pathology, infectious diseases residents

### **2005**

- Teaching practical parasitology to Pathology, infectious diseases and dermatology residents

### **2004-2005 Second terms**

- Teaching medical parasitology to M.S c. students of Pasteur Institute of Iran

### **2003-2004 First terms**

- Teaching medical parasitology to M.S c. students of Pasteur Institute of Iran

### **Gene Bank Submission**

**2010**, GenBank: GU376735.1 (Nucleotide) *Leishmania tropica* strain MHOM/IR/09/Mash-F stagespecific S antigen-like protein (A2) gene, complete cds.

<http://preview.ncbi.nlm.nih.gov/nucore/288551599>

**2010**, GenBank: ADC53298.1 (Protein) Stage-specific S antigen-like protein [*Leishmania tropica*]. <http://preview.ncbi.nlm.nih.gov/protein/288551600>

**2010**, GenBank: GU235991.1 (Nucleotide) *Leishmania major* strain MRHO/IR/75/ER stage-specific S antigen-like protein (A2) gene, complete cds.

<http://preview.ncbi.nlm.nih.gov/nucore/281490069>

**2010**, GenBank: ADA71542.1 (Protein) Stage-specific S antigen-like protein [*Leishmania major*]. <http://preview.ncbi.nlm.nih.gov/protein/281490070>