

Sepideh Tolouei, Ph.D.

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Isfahan, Iran

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EDUCATION

Isfahan University of Medical Sciences, School of Medicine, Isfahan, Iran, 2007-2011

Ph.D. Medical Parasitology,

Isfahan University of Medical Sciences, School of Medicine, Isfahan, Iran, 1998-2001

MSc. Medical Parasitology

Azad University, Tehran Medical School, Iran, 1987-1991

BSc Medical Laboratory Sciences

Dissertation Title: Immunologic study of TLR2 and TLR4 in Macrophages of chronic and non-chronic cutaneous *Leishmaniasis* patients.

WORK HISTORY

- Assistant Professor, Isfahan University of Medical Sciences, School of Medicine, Isfahan, Iran
Present.
- Executive Director, Isfahan University of Medical Sciences Vice Chancellery for Research,
School of Medicine, Isfahan, Iran. 2014- Present
- Medical Laboratory Chief Technologist: Alzahra Hospital, Isfahan University of Medical
sciences, Isfahan, Iran. 1993- 2009

MAJOR PROJECTS

1. Mentor: "Genotyping of MSP3a genes of Plasmodium vivax isolates from patients in Isfahan province (Iran) by nested PCR "-2017
2. Co-Investigator: "Inhibition of microRNA let-7a using Locked Nucleic Acid (LNA) technology and evaluation of its effects on apoptosis and necrosis of macrophages infected with *Leishmania major*". -2016
3. Mentor: "Expression of TLR2, TLR4 and microRNAs hsa-mir-103a, hsa-mir-217, hsa-mir-376a and hsa-mir-410 in Peripheral Blood Mononuclear Cells of Multiple Sclerosis patients".- 2014
4. Mentor: "Evaluating the gene expression of IL-12 in the fibrous layer of hepatic hydatid cysts isolated from ovine and bovine hydatid cysts".-2012
5. Mentor: "Evaluating the gene expression of IL-4 in the fibrous layer of hepatic hydatid cysts isolated from ovine and bovine hydatid cysts".-2013
6. Co-Investigator: "Effect of Supernatant of Peripheral Blood Mononuclear Cell Culture, Infected with *Leishmania major*, on Keratinocyte and Fibroblast Cell Cultures". -2010
7. Mentor: "Comparison of Interleukin-12 levels produced by Peripheral Blood Mononuclear Cells in normal cases before and after stimulation with *Candida albicans* in-vitro".-2014
8. Mentor: "Molecular identification of *Cryptosporidium* spp. in different dairy farm of Isfahan province by nested PCR-RFLP".- 2015

9. Mentor: "Study of genetic polymorphism of *Leishmania major* by RFLP-PCR technique in Chabahar Iran".- 2011
10. Mentor: "Frequency of *Candida* species in oral cavity of patient under cancer chemotherapy in compared with healthy control and determination of fluconazole MIC against oral fungal isolates". 2015
11. Mentor "Prevalence of *Toxoplasma gondii* parasite genotypes using PCR-RFLP technique in soil samples collected from different areas of Isfahan city".-2016
12. Mentor: "Reaction of antibodies against hydatid Cyst, *Toxoplasma gondii*, *Tricomonas vaginalis* antigens with cancer cells Surface Antigen 4T1 (Breast), B16F10 (Melanoma) using flow cytometry technique".-2016
13. Mentor: "Evaluating the gene expression of Fas-L, caspase3, Bax, Bcl2 in fertile and infertile bovine hydatid cysts". -2016
14. Co-Investigator: "Effect of TCA50% on cutaneous leishmaniasis in murine model".- 2008

PUBLICATIONS

1. Molecular characterization of *Candida dubliniensis* and *Candida albicans* in the oral cavity of drug abusers using duplex polymerase chain reaction. Parastoo Hassani Abharian, Parvin Dehghan, Peyman Hassani Abharian, **Sepideh Tolouei**. *Current Medical Mycology* 2018(4):12-17
2. Locked nucleic acid -anti- let-7a induces apoptosis and necrosis in macrophages infected with *Leishmania major* Nooshin Hashemi, Mohammadreza Sharifi, Mohsen Masjedi, **Sepideh Tolouei**, Mitra Hashemi, Nahid Mortazavidehkordi, Mohammad Ali Mohaghegh, Cyrus Hashemi, Seyed Hossein Hejazi. *Microbial Pathogenesis* 119 (2018) 193–199.
3. TLR-2, IL-10 and IL-17-mediated immunity in experimental chemotherapy murine model of systemic candidiasis; cyclophosphamides' impact and roles. Parvin Dehghan, **Sepideh Tolouei**, Behzad Baradaran, Sanam Nami, Hamid Morovati. *Microbial Pathogenesis* 119 (2018) 183–192.
4. Prevalence of Coccidians and Helminthes Ova in Soil Samples from Public Places in Isfahan City, Iran, 2016. Farnaz Heshmat, Hossein Ali Yousefi, **Sepideh Tolouei**, Nader Pestechian. *Journal of Isfahan Medical School*, Vol. 35, No. 431, 3rd Week, July 2017(Persian)
5. Expression of hsa Let-7a MicroRNA of Macrophages Infected by *Leishmania Major*. Nooshin Hashemi, Mohammadreza Sharifi, **Sepideh Tolouei**, Mitra Hashemi, Cyrus Hashemi and Seyed Hossein Hejazi. *International Journal of Medical Research & Health Sciences*, 2016, 5, 10:27-32.
6. Identification of *Candida* species in patients with oral lesion undergoing chemotherapy along with minimum inhibitory concentration (MIC) to fluconazole. Mehrnoush Maheronnaghsh, **Sepideh Tolouei**, Parvin Dehghan, Mostafa Chadeganipour, Maryam Yazdi. *Advanced Biomedical Research*, 2016, Volume 5, Issue 1 [p. 132]
7. The Effect of Cyclophosphamide on TLR2 Gene Expression in Balb/c Mice with Systemic Candidiasis, Hamid Morovati, **Sepideh Tolouei**, Parvin Dehghan, Behzad Baradaran, Amir Mohamadifard, *Journal of Isfahan Medical School*, Vol. 34, No. 389, 1st Week, September 2016.(Persian)

8. Evaluating the gene expression level of IL-12 in the fibrous layer of hepatic hydatid cysts isolated from slaughtered animals. Roghiyeh Faridnia , **Sepideh Tolouei** ,Hosein Khanahmad-Shahreza , Hamed Kalani ,Hosein Yousefi-Darani Comp Clin Pathol .2015 January 24:1193–1196.
9. Effect of passive transfer of anti-hydatid cyst antigen antiseta on melanoma tumor growth in animal model. Fereshteah Jafaei Nodeh, Seyedeh Maryam Sharafi, **Sepideh Tolouei**, Seyed Hossein Hejazi, Zahra Dorosti , Hossein Yousofi Darani. World Journal of Oncology Research, 2015, Vol. 2.
10. Antigenic profile of heat-killed versus thimerosal-treated *Leishmania major* using sodium dodecyl sulfate-polyacrylamide gel electrophoresis. Reza Arjmand, Simindokht Soleimani Fard, Sedigheh Saberi, **Sepideh Tolouei**, Ali Khamesipour, Seyed Hossein Hejazi. Adv Biomed Res, 2015 Jun 4;4:128.
11. Cytokines Gene Expression in Newly Diagnosed Multiple Sclerosis Patients. Seyed Javad Hasheminia, **Sepideh Tolouei**, Sayyed Hamid Zarkesh-Esfahani ,Vahid Shaygannejad, Hedaiat allah Shirzad, Reza Torabi, Morteza Hashem Zadeh Chaloshitory. Iran J Allergy Asthma Immunol. 2015.Apr;14(2):208-16.
12. Toll like receptor 2 and 4 expression in peripheral blood mononuclear cells of multiple sclerosis patients. Hasheminia SJ, Zarkesh-Esfahani SH, **Tolouei S**, Shaygannejad V, Shirzad H, Hashemzadeh Chaleshtory M.Iran J Immunol. 2014 Jun;11(2):74-83.
13. Identification of *Leishmania* isolates from Varzaneh city, Isfahan province, Iran using nested polymerase chain reaction method, Reza Arjmand, Sedigheh Saberi, **Sepideh Tolouei**, Zahra Chizari, Reza Fadaei Nobari,Simindokht Soleimani Fard, Mojtaba Akbari, Seyed Hossein Hejazi. Adv Biomed Res 2014;3:167
14. Identification of leishmania isolates from healing and nonhealing cutaneous leishmaniasis patients using internal transcribed spacer region PCR.**Tolouei S**, Hejazi SH, Ghaedi K, Hasheminia SJ.Jundishapur J Microbiol. 2014 Apr;7(4):e9529.
15. IL-4 gene expression in adventitial layer (fibrous layer) of hepatic ovine and bovine hydatid cysts. Zahra Dorosti **Sepideh Tolouei**, Hossein Khanahmad, Rasool Jafari, Fereshteh Jafaei Seyedeh Marayam, Sharafi Hossein, Yousofi Darani. J Parasit Dis.2014 October. DOI 10.1007/s12639-014-0593-5
16. TLR2 and TLR4 in cutaneous leishmaniasis caused by *Leishmania major*.**Tolouei S**, Hejazi SH, Ghaedi K, Khamesipour A, Hasheminia SJ.Scand J Immunol. 2013 Nov;78(5):478-84. doi: 10.1111/sji.12105.
17. Comparison of Protein Profile of Killed and Autoclaved *Leishmania Major* Using Polyacrylamide Gel Electrophoresis Reza Arjmand MSc, Simindokht Soleimanifard MSc, Sedigheh Saberi MSc, **Sepideh Tolouei**, Ali Khamesipour, Seyed Hossein Hejazi. Journal of Isfahan Medical School. Vol. 30, No. 221, 3rd Week, March 2013.(Persian)

18. Study of IL-12 Agonists in Macrophages from Patients with Healing and Non-Healing Forms of Cutaneous leishmaniasis. **Sepideh Tolouei**, Seyed Hossein Hejazi, Seyed Javad Hashemini MSc, Reza Arjmand, Ali Khamesipour, Mohamad Ali Nilforoushzadeh. Journal of Isfahan Medical School. Vol. 31, No. 252, 2nd Week, November 2013. (Persian)
19. IL-23 and IL-27 Levels in Macrophages Collected from Peripheral Blood of Patients with Healing Vs Non-Healing Form of Cutaneous Leishmaniasis. **S Tolouei**, K Ghaedi, A Khamesipour, M Akbari, M Baghaei, SJ Hashemini, M Narimani, SH Hejazi. Iranian J Parasitol, Vol. 7, No.1, 2012, pp. 18-25.
20. Leishmanicidal Activity of Films Containing Paromomycin and Gentamicin Sulfate both In Vitro and In Vivo. **Tolouei S**, Hashemini S, Narimani M, Khamesipour A, Shatalebi M, Hejazi Sh. Iran J Parasitol. Iranian J Parasitol: Vol. 6, No.3, 2011, pp.60-65.
21. Brain Heart Infusion Broth as a Proliferative Factor for Multiplication of L.Major. **Sepideh Tolouei**, Seyed Javad Hashemini, Afsaneh Kavooosi Fereshteh Saheb Al Fosool MSc, Manijeh Narimani MSc, Seyed Hossein Hejazi. Journal of Isfahan Medical School, Vol 29, No 158, 2nd week, December 2011. (Persian)
22. The study of therapeutic effect of Paromomycin Sulfate drug films in combination Gentamicin Sulfate to treat cutaneous Leishmaniasis. Mostaghim M, Hejazi Sh, **Tolouei S**, Shatalebi M. Urmia Medical Journal, July 2003 (Persian)

ORAL AND POSTER PRESENTATION

1. Participated and poster presentation in 6th World Congress on Leishmaniasis. May 16-20, 2017 Spain
2. Participated in 3th Congress on molecular medicine December 2016 Isfahan, Iran
3. Participated and poster presentation in 12th International congress of Immunology & allergy, May 2014, Tehran, Iran
4. Participated and poster presentation in 5th World Congress on Leishmaniasis. May 13-17 2013 Brazil
5. Participated and poster presentation in 1st International and 8th National Congress of parasitology and parasitic disease. (NICOPA 8th) Oct 2012, Kerman, Iran.
6. Participated and oral presentation in 4th Dermatology and Cutaneous Leishmaniasis congress. 2011, Isfahan, Iran.
7. Participated in 7th National and Regional Congress of parasitology and parasitic disease in Iran. Nov 2010, Tehran, Iran.
8. Participated and oral presentation in 3th Dermatology and Cutaneous Leishmaniasis congress, 2007 Isfahan, Iran.
9. Participated and poster presentation in 8th Iranian congress of Immunology & allergy, May 2006, Mashhad, Iran,
10. Participated and oral presentation in Dermatology and Cutaneous Leishmaniasis congress July 2003, Isfahan, Iran,

PUBLISHED BOOKS

1. Immunology techniques in the Laboratory, Publisher: Manii publishing, Isfahan, Iran 2011(Persian)
2. Biology of Parasites .Publisher: Azad University of Brojerd, Iran.2011 (Persian)
3. Medical Malacology. Publisher: Pars Tak.Iran.2017(Persian)

RESEARCH SKILLS

- Knowledge and working experience of cell culture techniques
- Knowledge and working experience of DNA & RNA extraction
- Knowledge and working experience of PCR and Real time PCR
- Working experience with laboratory animal handling
- Culturing of *Leishmania* in mono-phasic and bi-phasic media
- Knowledge and working experience of Flow Cytometry and ELISA

TEACHING EXPERINCE

- Medical Parasitology (Basic, advanced and practical) to under graduated students, 2009 -present
- Practical Parasitology to MSc. students of Medical Parasitology, 2009 -present
- Practical Immunoparasitology to MSc. and Ph.D. students of parasitology, 2009 –2016

SCIENTIFIC ACTIVITIES

- Lecturer in workshop on “DNA extraction, PCR and Gel Electrophoresis” organized by School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, 2014
- Lecturer in workshop on “Real time RT-PCR” organized by School of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran, 2014
- Lecturer in workshop on PCR, organized by Dentistry Faculty, Isfahan University of Medical Sciences, Isfahan, Iran,2011