

## Curriculum vitae

### Personal information:

Name Hamed  
Surname Behniafar  
Date of birth September 1988  
Place of birth Kaleybar, Iran  
Sex Male  
Material status Married  
Nationality Iranian

### Addresses:

Residential Sarab, Iran  
E-mail [hbehniafar@sbm.ac.ir](mailto:hbehniafar@sbm.ac.ir), [hbehniafar@yahoo.com](mailto:hbehniafar@yahoo.com), [h.behniyafar@gmail.com](mailto:h.behniyafar@gmail.com)  
Office -  
Phone: +989143262782

### Educations:

2014 – 2019 Ph.D in Medical parasitology, Shahid Beheshti University of Medical sciences

The title of thesis: Study of molecular epidemiology of visceral leishmaniasis (human infection, animal reservoirs and sandfly vectors) and genetic diversity of *Leishmania infantum* in Kaleybar and Khada Afarin counties, East Azerbaijan province, during 2016-17

2007-2014 Doctor of Veterinary Medicine (D.V.M), University of Tabriz

The title of D.V.M thesis: Serologic evaluation of *Toxoplasma gondii* prevalence in sheep in tabriz by immunoblotting assays (western blot and dot blot), Score: 20

**Current position:**

Assistant professor, Sarab Faculty of Medical Sciences, Sarab, East-Azerbaijan, Iran

**Technical experiences:**

SDS-PAGE

Western blot

PCR

Culture of parasites

**Deposition of 63 sequences of different parasites in the GenBank for the first time:**

Accession numbers: KR07213- KR07230, KT159894, KT362355, KT362656, MG755817-24, MF462196-211, KY612600-11, MN417272-7.

**Publications (Full texts):**

1. **Hamed Behniafar**, Maryam Niyiyati and Zohreh Lasjerdi. Molecular Characterization of Pathogenic *Acanthamoeba* Isolated from Drinking and Recreational water in East Azerbaijan, Northwest Iran. *Environmental Health Insight*, 2015:9
2. Naghi Mohammad Bagherzadeh, **Hamed Behniafar\***, Sadegh Rahbari, Soghra Valizadeh. Prevalence of hypodermosis in cattle slaughtered in industrialslaughtered-house of Ardebil, Iran. *J Parasit Dis*. 2016, 40(4):1579-1582
3. Mahmoodreza Behravan, **Hamed Behniafar**, Soodabeh Einipour, Nazanin Dorani, Ali Naghizadeh\*. Morphological and Molecular Identification of *Acanthamoeba* spp. from Surface Waters in Birjand, Iran, during 2014-2015. *Arch Hyg Sci*, 2016, 5(2).
4. Maryam Niyiyati\*, **Hamed Behniafar**, Naser Velaei. Isolation and characterization of potentially pathogenic free living amoebas (*Vermamoeba* and *Vahlkampfiids*) from water sources in Jolfa county, East Azerbaijan province, during 2013-2014. *Pejouhandeh* 2015, 20 (5):289-294, (in Persian).
5. \*Maryam NIYYATI, Zohreh LASJERDI, Saeed ZAREIN-DOLAB, Mahdiah NAZAR, **Hamed BEHNIAFAR**, Mohammad Reza MAHMOUDI, Ehsan NAZEMALHOSSEINI MOJARAD. Morphological and Molecular Survey of *Naegleria* spp. in Water Bodies Used for Recreational Purposes in Rasht city, Northern Iran. *Iran J Parasitol*, Vol. 10, No. 4, Oct -Dec 2015, pp.523-529.
6. **Hamed BEHNIAFAR**, Maryam NIYYATI\*, Zohreh LASJERDI, Samira DODANGHEH. High Occurrence of Potentially Pathogenic free Living Amoebae in Water Bodies of Kaleybar and Khodaafarin, East Azerbaijan Province. *Current World Environment*. Vol. 10(Special Issue 1), 727-731 (2015).
7. Ali Rostami, Maryam Ebrahimi, Saeed Mehravar, Vahid Fallah Omrani, Shirzad Fallahi\*, **Hamed Behniafar**. Contamination of commonly consumed raw vegetables with soil transmitted

helminthes eggs in Mazandaran province, northern Iran. International Journal of Food microbiology, 225 (2016) 54-58

8. Mahmoodreza Behravan, Mohammad Malekaneh, Behzad Mesbahzadeh, Golamreza Sharifzadeh, Sharifzadeh, Mohammad Hasan Namaei, **Hamed Behniafar**, Zohreh Lasjerdi\*. Microscopic isolation and characterization of free living amoebae (FLA) from surface water sources in Birjand, the capital city of the South Khorasan. Journal of Birjand University of Medical Sciences. 2015, 22 (2), (in Persian)

9. Maryam NOROUZI, \*Seyyed Javad SEYYED TABAEI, Maryam NIYYATI, Vafa SA-BER, **Hamed BEHNIAFAR**. Genotyping of *Toxoplasma gondii* strains isolated from patients with ocular toxoplasmosis in Iran. Iran J Parasitol, Vol. 11, No. 3, Jul -Sep 2016, pp.316-324.

10. Ali ROSTAMI, Seyyed Javad SEYYEDTABAEI\*, Somayeh AGHAMOLAIE, **Hamed BEHNIAFAR**, Zohreh LASJERDI, Alireza ABDOLRASOULI, Saeed MEHRAVAR & Cosme ALVARADO-ESQUIVEL. SEROPREVALENCE AND RISK FACTORS ASSOCIATED WITH *Toxoplasma gondii* INFECTION AMONG RURAL COMMUNITIES IN NORTHERN IRAN. Rev. Inst. Med. Trop. Sao Paulo, 2016, 58:70.

11. Farideh HEZARI , \*Maryam NIYYATI, \*Seyyed Javad SEYYED TABAEI, Mehdi MOHEBALI, Vahideh MOIN VAZIRI, **Hamed BEHNIAFAR**, Eznolah, AZARGASHB, Niloofar TAGHIPOUR. Frequency of Cutaneous Leishmaniasis and Species Identification in Suspected Individuals from Golestan Province, Northern Iran in 2014. Iran J Public Health, Vol. 45, No.10, Oct 2016, pp.1348-1354.

12. Mohammad Mohsen Homayouni, **Hamed Behniafar\***, Amir Sayed Ali Mehbod, Mohammad-Javad Mohammad-Sadeghi, Bahman Maleki. Prevalence of Pneumocystis jirovecii among immunocompromised patients in hospitals of Tehran city, Iran. J Parasit Dis, Vol. 41, No.3, Sep 2017, pp.850-853.

13. Ehsan Javanmard, Maryam Niyati, Jacob Lorenzo-Morales, Zohreh Lasjerdi, **Hamed Behniafar**, Hamed Mirjalili. Molecular identification of waterborn free living amoebae (Acanthamoeba, Naegleria and Vermamoeba) isolated from municipal drinking water and environmental sources, north half of Iran. Experimental Parasitology, Vol. 183, December 2017, Pages 240-244.

14. S. Fallahi, A. Rostami, M. Nourollahpour Shiadeh, **H. Behniafar**, S. Paktinat. An updated literature review on maternal-fetal and reproductive disorders of *Toxoplasma gondii* infection. Journal of gynecology obstetrics and human reproduction, Vol. 47, Issue 3, March 2018, pp.133-140.

15. P. Shahbazi, A. Nematollahi, **H. Behniafar**, A. Imani Baran. A survey on the seroprevalence of Toxoplasmosis in sheep from rural areas of Tabriz by Immunoblotting assays. Iranian Veterinary Journal, Vol. 13, Issue 4, March 2018, pp.43-52 (in Persian).

16. M. Niyati, A. Naghahi, **H. Behniafar**, Z. Lasjerdi. Occurrence of Free-living Amoebae in Nasal Swabs of Patients of Intensive Care Unit (ICU) and Critical Care Unit (CCU) and Their Surrounding Environments. Iran J Public Health, Vol. 47, No.6, Jun 2018, pp.908-913.

17. M. Niyayati, Z. Jonaydi, **H. Behniafar**, N Valai. Contamination of tap water sources to *Acanthamoeba* spp. in selected cities of Hormozgan province, Iran. *Researcher Bulletin of Medical Sciences*, Vol 22, Issue 1, Dec 2017.
18. Somayeh Aghamolaie, Seyyed Javad Seyyedtabaei, **Hamed Behniafar**, Masoud Foroutan, Vafa Saber, Hooman Hanifehpur, Saeed Mehravar and Ali Rostami. Seroepidemiology, modifiable risk factors and clinical symptoms of *Toxocara* spp. infection in northern Iran. *Transactions of the Royal Society of Tropical Medicine and Hygiene*. First online 08 November 2018.
19. Aliyar MIRZAPOUR, Adel SPOTIN, **Hamed BEHNIAFAR**, Hakim AZIZI, Bahman MALEKI, Homayon SHAKERAMINIA, Seyyed Javad SEYYED TABAEI. Intra-Species Diversity of *Leishmania major* and *L. tropica* from Clinical Isolates of Cutaneous Leishmaniasis in Southwest Iran Inferred by ITS1-rDNA. *Iran J Public Health*, Vol. 48, No.5 May 2019, pp.893-903.
20. **Hamed Behniafar**, Vahideh Moin-Vaziri, Mehdi Mohebbali, Seyyed Javad Seyyed Tabaei, Zabih Zarei, Elham Kazemirad, Behnaz Akhouni, Mohammad Kazem Saharifi-Yazdi, Alireza Zahraei-Ramazani. Visceral leishmaniasis among children in an endemic area of northwestern Iran between 2016 and 2017: An epidemiological study. *Asian Pacific Journal of Tropical Medicine*, July 2019 Vol. 12, No.7, pp. 306-314.
21. Ali Rostami, Seyed Mohammad Riahi, Despina G. Contopoulos-Ioannidis, H. Ray Gamble, Yadolah Fakhri, Malihe Nourollahpour Shiadeh, Masoud Foroutan, **Hamed Behniafar**, Ali Taghipour, Yvonne A. Maldonado, Ali H. Mokdad, Robin B. Gasser. Acute *Toxoplasma* infection in pregnant women worldwide: A systematic review and meta-analysis. *Plos Neglected Tropical Diseases*, October 14, 2019 Vol. 13, No.10, pp. 1-20 (e0007807).
22. Aliyar MIRZAPOUR, Alireza BADIRZADEH, Marzieh ASHRAFMANSOURI, **Hamed BEHNIAFAR**, Maryam NOROUZI, Hakim AZIZI, Mahmoodreza BEHRAVAN, Seyyed Javad SEYYED TABAEI. Super Infection of Cutaneous Leishmaniasis Caused by *Leishmania major* and *L. tropica* to *Crithidia fasciculata* in Shiraz, Iran. *Iran J Public Health*, Vol. 48, No. December 2019, pp. 2285-2292.
23. A. Rostami, S.M. Riahi, H.R. Gamble, Y. Fakhri, M. Nourollahpour Shiadeh, M. Danesh, **H. Behniafar**, S. Paktinat, M. Foroutan, A.H. Mokdad, P.J. Hotez, R.B. Gasser. Global prevalence of latent toxoplasmosis in pregnant women: a systematic review and meta-analysis. *Clinical Microbiology and Infection*, Article in press.
- 23 A. Rostami, S.M. Riahi, H.R. Gamble, Y. Fakhri, M. Nourollahpour Shiadeh, M. Danesh, **H. Behniafar**, S. Paktinat, M. Foroutan, A.H. Mokdad, P.J. Hotez, R.B. Gasser. Global prevalence of latent toxoplasmosis in pregnant women: a systematic review and meta-analysis. *Clinical Microbiology and Infection*, Vol. 26, Issue 6, June 2020, pp 673-83.
24. Somayeh Aghamolaie, **Hamed Behniafar**, Mahmoodreza Behravan, Homa Hajjaran, Vahideh Moin Vaziri\*. Probability of false-negative results in microscopical detection of cutaneous

leishmaniasis: more accurate screening by kDNA-PCR during epidemiological survey. J Parasit Dis. 2020, 44 (4):781-84.

25. Sahar Ghodsian, Niloofar Taghipour\*, Niloofar Deravi, **Hamed Behniafar**, Zohreh Lasjerdi. Recent researches in effective antileishmanial herbal compounds: narrative review. Parasitology Research, 2020, 119 (12):3929-46.

26. Leila Haghighi, Mohsen Rahimi, **Hamed Behniafar\***, Niloofar Taghipour\*, Ramezan Jafari. A Challenging Diagnosis of Two Ruptured and Intact Pulmonary Echinococcal Cysts in a 54- Year- Old Woman: A Case Report. Acta Parasitologica, Published online: 03 April 2021.

27. **Hamed Behniafar**, Vahideh Moin Vaziri, Seyyed Javad Seyyed Tabaei, Niloofar Taghipour. Comparison of Three Commonly Used Genetic Markers for Detection of *Leishmania Major*: An Experimental Study. Ethiop J Health Sci., 2021, Vol. 31, No. 4: 725-30.

28. Ali Rostami\*, Seyed Mohammad Riahi, Sahar Esfandyari, Haniyeh Habibpour, Abolfazl Mollalo, Aliyar Mirzapour, **Hamed Behniafar**, Somayeh MohammadiMoghadam , Nastaran Azizi Kyvanani, Shima Aghaei, Negar Bazrafshan, Sobhan Ghazvini. Geo-climatic factors and prevalence of chronic toxoplasmosis in pregnant women: A meta-analysis and meta-regression. Environmental Pollution, Available online 14 July 2021.

29. S. Valizadeh, A. Majdi Seghinsara, K. Maleki Chollou, A. Bahadori, S. Abbaszadeh, M. Taghdir, **H. Behniafar\*** and S.M. Riahi. The efficacy of probiotics in experimental autoimmune encephalomyelitis (an animal model for MS): a systematic review and meta-analysis. Letters in Applied Microbiology, October 2021, Vol. 73, Issue 4: 408-17.

30. Jafar Ganjipour Sales, **Hamed Behniafar**, Mohammadreza Bazavar, Mojtaba Varshochi, Abbas Majdi Seghinsara. Hydatid cysts of the pelvis following pulmonary hydatid disease: A rare case report. Heliyon, September 2021, Vol. 7, Issue 9.

31. Zahra Arab-Mazar, Maryam Niyyati, **Hamed Behniafar**, Zohreh Lasjerd. A survey of Free-Living Amoebae (FLAs) in Nasal Mucosa of Healthy Individuals using Culture-based Method. Novelty in Biomedicine, 2021, Vol 9, Number 4.

32. Maryam Norouzi, Maryam Niyyati, **Hamed Behniafar**. Microbial Biofilms as a Risk Factor for Acanthamoeba keratitis. Novelty in Biomedicine, 2022, Vol 10, Number 1.

33. Amirreza Javadi Mamaghani, Zahra Arab- Mazar, Siamak Heidarzadeh, Mohammad Mehdi Ranjbar, Shima Molazadeh, Sama Rashidi, Farzad Niazpour, Mohadeseh Naghi Vishteh, Homayoon Bashiri, Arezoo Bozorgomid, **Hamed Behniafar**, Mohammad Ashrafi. In- silico design of a multi- epitope for developing sero- diagnosis detection of SARS- CoV- 2 using spike glycoprotein and nucleocapsid antigens. Network Modeling Analysis in Health Informatics and Bioinformatics, 2021, Vol 10, Number 1.

#### **Abstracts in scientific meeting:**

1. Morphological and molecular identification of *Naegleria* spp. from water resources of Rasht City, Gilan province. 9th European Congress on Tropical Medicine and International Health.

2. Hartmannella and thecameoba contamination of recreational water sources in kaleybar and khodaafarin, east azerbaijan. The third national seminar on the role of medical basic sciences in health promotion.

3. Molecular characterization of pathogenic *Acanthamoeba* isolated from drinking and recreational water in East-Azerbaijan Iran. The 16<sup>th</sup> International and Iranian Congress of Microbiology.

4. High occurrence of potentially pathogenic free living amoebae in water bodies of Kaleybar and Khodaafarin, East Azerbaijan province. دومین همایش ملی پژوهش های کاربردی در علوم شیمی، زیست شناسی و زمین شناسی.

5. Significant increase of *Mycobacterium bovis* growth rate with irradiation of 630-640 nm, 5 mW power, low level Helium-Neon laser. The 13<sup>th</sup> Iranian and The 2<sup>nd</sup> international congress of Microbiology.

۶. گزارش وقوع تلفات ناشی از مسمومیت همزمان با گیاهی از تیره نعناع (Lamiaceae) و مایکوتوکسین های ناشی از آسپرژیلوس (Spp) و فوزاریوم (Spp) در یکی از گاوداری های اطراف تبریز. هفدهمین دوره کنگره دامپزشکی ایران.

7. Occurrence of free-living amoeba in Nasal swaps of patients of Intensive Care Unit (ICU) and Critical Care Unit and their surrounding environments. The 3rd International & 10th National Congress of Parasitology & Parasitic Diseases of Iran (NICOPA10).

8. Comparison of three common molecular markers for detection of Leishmania DNA by PCR. The 4rd International & 11th National Congress of Parasitology & Parasitic Diseases of Iran (NICOPA11).

9. Current epidemiological status of visceral leishmaniasis in Kaleybar and KhodaAfarin districts, Northwestern Iran. The 4rd International & 11th National Congress of Parasitology & Parasitic Diseases of Iran (NICOPA11).

10. Study on sand-fly founa in an endemic area of visceral leishmaniasis, Northwestern Iran. 2<sup>nd</sup> international Congress of Vector-Borne Disease and Climate Change & 4<sup>th</sup> National Congress of Medical Entomology.

#### **Publications (Books and books chapter):**

1. Maryam Niyati, **Hamed Behniafar**. Isolation, Cultivation and Identification of Free Living Amoebae from Environmental and Clinical Sources (With Color Atlas). Shahid Beheshti University of Medical Sciences and Health Services press, 2017, **in Persian**

2. Ali Rostami, Seyed Mohammad Riahi, Andreas Hofmann, Guangxu Ma, Tao Wang, **Hamed Behniafar**, Ali Taghipour, Yadolah Fakhri, Adel Spotin, Bill C.H. Chang, Calum N.L. Macpherson, Peter J. Hotez, Robin B. Gasser. Toxocar and Toxocariasis (Chapter: Global

prevalence of Toxocara infection in dogs). Imprint: Academic Press, ISBN: 9780128209585, Published Date: 15th May 2020.

### Patent:

دستگاه رنگامیزی اتوماتیک لام‌های آزمایشگاهی. شماره و تاریخ ثبت اختراع: ۷۵۰۸۸-۱۳۹۱/۰۲/۳۰

### Research projects:

۱- بررسی مولکولار اپیدمیولوژیک لیشمانیازیس احشایی (عفونت انسانی، مخازن حیوانی، و پشه خاکی های ناقل) و تنوع ژنتیکی *Leishmania infantum* در شهرستان های کلیبر و خداآفرین استان آذربایجان شرقی، در طی سال های ۹۶-۱۳۹۵. مرکز تحقیقات بیماری های قابل انتقال بین انسان و دام، دانشگاه علوم پزشکی تهران (کد ۳۱۸۳۲).

۲- بررسی مولکولار اپیدمیولوژیک لیشمانیازیس احشایی (عفونت انسانی، مخازن حیوانی، و پشه خاکی های ناقل) و تنوع ژنتیکی *Leishmania infantum* در شهرستان های کلیبر و خداآفرین استان آذربایجان شرقی، در طی سال های ۹۶-۱۳۹۵. دانشکده پزشکی، دانشگاه علوم پزشکی شهید بهشتی (کد ۸۷۲۷).

۳- استفاده از روش های مولکولی در تفکیک جنس ماده پشه خاکی های متعلق به زیرجنس لاروسیوس و آدلریوس (خانواده پسیکودیده) و بررسی آلودگی آن ها به انگل لیشمانیا در شهرستان های کلیبر استان آذربایجان شرقی، در طی سال های ۹۶-۱۳۹۵. دانشکده پزشکی، دانشگاه علوم پزشکی شهید بهشتی (کد ۱۴۲۸۵).

۴. برآورد شیوع جهانی و عوامل خطر مرتبط با توکسوپلاسموزیس حاد و مزمن در زنان باردار: مطالعه مرور نظامند و متآنالیز. دانشگاه علوم پزشکی بابل، (کد ۹۸۰۸۱۲۱).

۵. بررسی تاثیر باکتری های پروبیوتیک ریزپوشانی شده بر کیفیت میکروبی، شیمیایی و حسی نان. دانشکده پزشکی، دانشگاه علوم پزشکی بقیه الله.

۶. شناسایی ملکولی و تعیین ژنوتایپ های آمیب های آزادی پاتوزن آکانتامو و بالاموتیا در نمونه های آب آشامیدنی و تفریحی استان سمنان. دانشکده پزشکی، دانشگاه علوم پزشکی شهید بهشتی.