



Mohammad AKHOUNDI

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Birth date: 11/01/1980, Birth place: Tehran-Iran

2015 until now: Research engineer and parasitologist at Parasitology department, Archet hospital (Sophia Antipolis University), Nice, France

2013-2015: Postdoc of Parasitology. Parasitology and Mycology department of Archet hospital, Nice, France. Director: Professor Pierre Marty (marty.p@chu-nice.fr)

2009-2013: Ph.D of Parasitology - Reims Champagne -Ardenne University, Reims, France. Supervisor: Pr. J. Depaquit (Jerome.depaquit@univ-reims.fr). Title: «**Contribution to the study of leishmaniasis in Iran: Phlebotomus, parasites, reservoirs and human**»

2006-2008: MSc. of Medical Entomology - Tehran University of Medical Science,

2001-2003: BSc. of Medical Entomology - Tehran University of Medical Science, Iran

1998-2001: Associate Degree in the prevention and control of disease vectors (tropical and subtropical) – Iran University of Medical Science, Iran

1997-1998: Pre-University stage in Experimental Science

1996-1997: Diploma in Experimental Science

STUDIES

PROFESSIONAL EXPERIENCES

2005-2008: Medical laboratory technician at Department of clinical laboratory and medical Affairs in Imam Khomeini International Airport (IKIA- MOSHIRAN Co.), Tehran, Iran

2002-2003: Technician in Health Center of Abaro, Hamadan University of Medical Science, Iran

1-Edalat H, **Akhoundi M**, Basseri HR, Abaei MR, Kazemi SM, Abolhassani M, Kheirandish M. 2007: Age determination of *Anopheles stephensi* as the main vector of Malaria using High Performance Liquid Chromatography (HPLC). Hygiene and Public Health Journal. 7:83-87. (In Persian)

2-**Akhoundi M**, Edalat H, Basseri HR, Abaei MR, Kazemi SM. 2008: Study on the proteins in Salivary glands of *Anopheles stephensi* using western blot method. Hygiene and Public Health Journal. 12: 31-35. (In Persian)

3-**Akhoundi M**, Parvizi P, Baghaei A, Depaquit J. 2011: The subgenus *Adlerius* Nitzulescu (Diptera, Psychodidae, *Phlebotomus*) in Iran. Acta Tropica. 122: 7-15.

4-Baghaei A, Jasbi E, **Akhoundi M**, Mirzaei H, Dehnam O. 2012: Microscopic and molecular detection of *Leishmania* species among suspected patients of cutaneous leishmaniasis using ITS-r DNA in Fars province. J Sadoughi Univ Med Sci. 20: 464-73.

5-Parvizi P, **Akhoundi M**, Mirzaei H. 2012: Distribution, Fauna and Seasonal Variation of Sandflies, Simultaneous Detection of Nuclear Internal Transcribed Spacer Ribosomal DNA Gene of *Leishmania major* in *Rhombomys opimus* and *Phlebotomus papatasi*, in Natanz District in Central Part of Iran. Iranian Biomedical Journal. 16: 113-20.

6-**Akhoundi M**, Bakhtiari R, Guillard T, Baghaei A, Tolouei R, Sereno D, Toubas D, Depaquit J, Razzaghi Abayaneh M. 2012: Diversity of the bacterial and fungal microflora in midgut and cuticle of Phlebotomine sandflies collected in NorthWestern Iran. PloS ONE 7(11):e50259. doi: 10.1371/journal.pone.0050259.

PUBLICATIONS

7- **Akhoundi M**, Mohebalı M, Asadi M, Mahmodi MR, Amraei K, Mirzaei A. 2013: Molecular characterization of *Leishmania* spp. in reservoir hosts in endemic foci of zoonotic cutaneous leishmaniasis in Iran. Folia Parasitologica. 60:218-224.

8-**Akhoundi M**, Mirzaei A, Baghaei A, Alten B, Depaquit J. 2013: Sand flies (Diptera, Psychodidae) distribution in the endemic and non-endemic foci of visceral leishmaniasis in northwestern Iran. Journal of vector ecology. 38:97-104.

9-**Akhoundi M**, Hajjaran H, Baghaei A, Mohebalı M. 2013: Geographical Distribution of *Leishmania* Species of Human Cutaneous Leishmaniasis in Fars Province, Southern Iran. Iranian Journal of Parasitology. 8:85-91.

10-**Akhoundi M**, Baghaei A, Depaquit J, Parvizi P. 2013: Molecular Characterization of *Leishmania* Infection from Naturally Infected Sand Flies Caught in a Focus of Cutaneous Leishmaniasis (Eastern Iran). Journal of Arthropod Borne Disease. 7:122–131.

11-Depaquit J, Bounamous A, **Akhoundi M**, Augot D, Sauvage F, Dvorak V, Chaibullinova A, Pesson B, Volf P, Léger N. 2013: A taxonomic study of *Phlebotomus (Larrousius) perfliewi* s. l. Infection, Genetics and Evolution. 20:500-8.

12-Augot D, Ninio C, **Akhoundi M**, Lehrter V, Couloux A, Jouet D, Depaquit J. 2013: Characterization of two cryptic species, *Culicoides stigma* and *C.parroti* (Diptera: Ceratopogonidae), based on barcode regions and morphology. Journal of vector ecology. 38:260-5.

13- Cannet A, **Akhoundi M**, Berenger JM, Michel G, Marty P, Delaunay P. 2015: A review of data on laboratory colonies of bed bugs (Cimicidae), an insect of emerging medical relevance. Parasite 2015, 22, 21.

14- **Akhoundi M**, Cannet A, Arab MK, Marty P, Delaunay P. 2015: An old lady with *Pediculosis pubis* on the head hair. Journal of

European Academy of Dermatology and Venereology. DOI: 10.1111/jdv.13050.

15- **Akhoundi M**, Kengne P, Cannet A, Brengues C, Berenger JM, Izri A, Marty P, Simard F, Fontenille D, Delaunay P. 2015: Spatial genetic structure and restricted gene flow in bed bugs (*Cimex lectularius*) populations in France. *Infection, Genetics and Evolution*. 34: 236–243.

16- **Akhoundi M**, Kuhls K, Cannet A, Votypka J, Marty P, Delaunay P, Sereno D. 2016: A historical overview of the classification, evolution and dispersion of *Leishmania* parasites and sandflies. *PLOS Neglected Tropical Diseases*. 10(3): e0004349.

BOOK AND
SOFTWARE

Akhoundi M. et colleagues. Pictorial identification key of Phlebotominae sandflies in Iran (software CD), (ongoing).

PATENT

Akhoundi M, Sereno D, Cannet A. **Systeme et procede d'identification automatisee de Dipteres Hematophages**.
Patent number: France; PCT/FR15/000229

Official certificate of working with laboratory animals, approved by European Ethic committee of laboratory works, France

1- Chromatography (HPLC, GC and TLC)

2- Molecular Biology (Quantitative PCR, RT-PCR, standard PCR, Nested and semi-Nested PCR, Touch-up (down) PCR, Hot start-PCR, Soeing-PCR, Gradient-PCR and PCR-RFLP), Primer design

TECHNICAL
SKILLS

3- Genetics, Evolution and Biodiversity using Microsatellite analysis (**M**ulti **L**ocus **M**icrosatellite **T**yping: **MLMT**); (**M**ulti **L**ocus **S**equencing **T**yping: **MLST**), phylogenetic analysis using different genetic softwares *i.g.* PAUP, MEGA.

4-Culture, passage and maintenance of parasites (*Leishmania*), laboratory experiments with laboratory animals *i.g.* balb/c

5- Protein analysis (Western Blot, Eastern Blot, SDS-PAGE and ELISA)

WORKSHOP
AND

1- Workshop “Methods of transmission and control of Tropical and Sub-tropical diseases” in south of Iran (Tehran university-2005), in North-West of Iran (Tehran university-2007)

2- Workshop “Some practical methods for identification of *Leishmania* parasite using the morphological characters and molecular methods” (Tehran University-2008)

CONGRESS

3- Parasitology Congress, XI European Multicolloquium of Parasitology. Do we really know *Phlebotomus (Larrousius) perfiliewi*? Cluj-Napoca, Romania, July 2012

4- Vector Ecology Congress, XVIII European Society for Vector Ecology (E-SOVE 18). Diversity of the bacterial and fungal microflora in midgut and cuticle of Phlebotomine sandflies collected in North-Western Iran. Montpellier, France, October 2012

5- Punaises de lits en France metropolitaine Genetique spatiale et flux des genes de restriction. Dijon, France, April 2015

Submitting the new haplotypes of *Leishmania major* and *Leishmania tropica* in Genbank with access number of **JN541326** to **JN541338** from Sarbisheh County in Eastern border of Iran

Submitting the new haplotypes of *Leishmania major*, *L. tropica* and *L. infantum* in Genbank with access number of **KF701191** to **KF701213** from Fars province in south of Iran

Office Package (Word, Excel, Powerpoint, Access, outlook)

Photoshop

INFORMATICS

Chromatogate (Chromatography software)

GeneMapper, Peak Scanner, PopGene, Population, Structure, MSA (Microsatellite analyzer)

Staden package (Gap, Pregap), Sequencher

BioEdit, Clustal, PAUP, MEGA (Phylogeny)

Gene Runner, Oligo, CLC workbench, Genious, Fast-PCR (FPCR)

Sequencing package (Sequencher device software)

GIS

Minitap, SPSS

LANGUAGE
SKILL

French, English, Turkish, Persian