

Reports

Completed Research Projects with Publications



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List of completed Research Projects with Publication

1) Title of project :

Nitric –Oxide and its implication in mycobactericidal activity of mononuclear cells in tuberculosis

Principal Investigator : P.Farnia

Publication :

1. P. Farnia, F. Mohammadi, et al. Activation of human mononuclear cells for the killing of mycobacterium tuberculosis by pro inflammatory cytokines through a nitric-oxide dependent mechanism. Archives of Iranian Medicine 3(2);68-74 (2000).
- 2 .P. Farnia, F. Mohammadi, M.R. Masjedi, et al. Susceptibility to nitric-oxide in mycobacterium species and its implication in pathogenesis. *Int J Tuber Lung Dis* 2(11) suppl.2. Abst.184-PD (1998).

2) Title of project :

Primary assessing the ability of TB technical to identify AFB bacilli in smear Microscopy

Principal Investigator: P.Farnia

Publication :

1. P. Farnia, K. Ghazi Saidi, et al. Quality Control (QC) of microscopy proficiency testing in the national institute of tuberculosis and lung diseases. *Int J Tuber Lung Dis* 2(11) suppl.2. Abst.185-PC (1998).

3) Title of project :

To assess the DNA polymorphism among Iranian Mycobacterium tuberculosis.

Principal Investigator: P.Farnia

Host Institute: Collaboration of Cattolica University , Rome, Italy

Publication:

P.Farnia,F,G.FaddaAA Velayatei.Transmission Pattern Of Tuberculosis Using RFLP- based IS6110. *Archives of Iranian Medicine* 4(4):177-182 (2001)

4) Title of Project :

Comparison of mycobacteria growth indicator tube with BACTEC-460 TB system and Lowenstein-Jensen (LJ) media for detection and susceptibility testing of Mycobacterium- tuberculosis.

Principal investigator : P.Farnia

Dated :1999-2001

Publication :

1. F. Mohammadi, P. Farnia, et al. Comparison of mycobacteria growth indicator tube with BACTEC-460 TB system and Lowenstein-Jensen (LJ) media for detection of Mycobacterium-tuberculosis. *Int J Tuber Lung Dis* 3(9) suppl. 1. Abst420-D (1999).
- 2.F.Mohammadi , P.Farnia . Recovary of mycobacterium tuberculosis in clinical specimens and assessing drug susceptibility test by MGIT .*Jounal of Tanaffos* ,1(3) . 35-39 . 2002

5) Title of Project :

National Standardization of Tuberculosis laboratory methods in collaboration of center of Diseases preventive and control in Iran

Principal investigator : P.Farnia

Date : 1998- 2002

Publication :

1. M.Abbassi, P.Farnia, M. foroozesh, ,etal. National Standardization of Tuberculosis laboratory methods in Iran.. *Int J Tuber Lung Dis* 3(9) suppl. 1. Abst420-D (1999).
2. Smear microscopy book (1) , Translated to Persian from Laboratory services in tuberculosis control . *WHO Publication* 1999.

6) Title of Project :

Use of chitin in for detection of acid-fast bacilli in sputum

Prinicpal investigator : P.Farnia

Publication:

P. Farnia ,F.Mohammadi , AA.Velayati etal. .Improving sensitivity of direct microscopy fordetection of acid fast bacilli in sputum : Use of chitin in mucus digestion . *J.Clinical .Microbiology*. 40(2):508-511.2002.

7) Title of Project :

Molecular survey Of MTB isolates using IS6110, Spoligotyping and MIRUS typing

Principal Investigator : P.Farnia

Host institute: Mycobacteriology Department of Pasteur Institute. Paris ,France.

Publication :

1. P.Farnia .V.Vincent .et al Spoligotyping followed by IS6110 typing and MIRU typing for epidemiological studies of tuberculosis in capital city of Iran . *European Society of Mycobacteriology Congress* . 23 –26 June 2002.Abst (P 14) .
2. P.Farnia .F.Mohammadi , MR Masjedi , et al . Evaluation of tuberculosis transmission in Tehran using RFLP and spoligotyping methods. *Journal of Infection*. 2004 ;49: 94-101.

8) Title of Project:

Rapid detection of live AFB in sputum specimens : using oxidative methods

Principal Investigator : P.Farnia

Publication:

1. P.Farnia , F.Mohammadi , M.Mersaedi etal. Bacteriological follow-uo of pulmonary tuberculosis treatment : a study with a simple colorimetric assay . *Journal of Microbes & infection* .6, 972-976 (2004)
2. P.Farnia , F.Mohammadi , M.Mersaedi etal . Application of oxidation –reduction assay for monitoring treatment of patients with pulmonary tuberculosis. *Journal of clinical Microbiology*_.42,3324-3325(2004).

9) Title of Project :

In-Vitro detection and comparison of Alfa-Crystalline protein experssion at non-replicating phase of susceptible and MDR strains of mycobacterium tuberculosis in NRITLD .

Principal Investigator : P.Farnia

Co – investigator: M.Nagafi (PH.D Student in bacteriology)

Publication:

M.Najafi .P.Farnia, K.Ghazisaidi, et al . Expression of alpha-crystalline protein in the in-vitro model of hypoxically induced non replicating persistence of Mycobacterium tuberculosis . *Journal of Tanaffos*.2005 ,4,43-52.

10) Title of Project :

To assess the Expression of PcaA gene in mycobacterium tuberculosis in different state of MTB viability

Principal Investigator : P.Farnia

Co – investigator: R.Ramazanadha (PH.D Student in bacteriology)

Publication:

RamazanadehR, Farnia.P, Amirmozafari et al . Comparison between molecular epidemiology, geographical regions and drug resistance in Mycobacterium tuberculosis strains isolated from Iranian and afghan patients *Chemotherapy* .2006;52(6):316-320 .

11) 11) Title of Project :

To standardized the susceptibility test with disk Agar diffusion test and proportional methods using second line regime for MDRTB patients

Principal Investigator : P.Farnia

Co – investigator: S.Sorosh (MSC Student in bacteriology)

Publication:

Masjedi MR, Farnia P, Soroosh S. et al.Extensively drug-resisant tuberulosis:2 years of surveillance in Iran .*Clin Infect Dis*. 2006 .1;43:841-7.

12) Title of Project :

Quality Control program of 285 peripheral and intermediates TB laboratory

Principal Investigator : P.Farnia

Co – investigator: M.Abbassi (Head of Iranian reference laboratory)

Publication:

.P.Farnia , MR ,Masjedi , F.Mohammadi , M.Nasehi ,etal . The results of three years surveillance on sputum smear microscopy in 285 district and regional tuberculosis laboratories of Iran. *Journal of Tanaffos* .2 (5) ,29-36 (2003) .

13) Title of Project :

Rapid detection and identification of mycobacterium –tuberculosis using spoligotyping techniques and RFLP

Principal Investigator: P.Farnia

Co – investigator: B.Naseri (M.SC Student in bacteriology) .

Publication:

1. Farnia .P, Masjedi M, Mirsaeidi M ,et al. Prevalence of Haarlem I and Beijing types of Mycobacterium tuberculosis strains in Iranian and Afghan MDR-TB patients.*J.Infect*.2006;53: 331-336.
2. Velayati AA, Farnia P, Miraseidi M, Masjedi MR.. The most prevalent Mycobacterium tuberculosis superfamilies among Iranian and Afghan TB cases . *Scand J Infect Dis* . 2006;38:463-468.

14) Title of Project :

Rapid detection and low –cost colorimetric method

Principal Investigator : P.Farnia

Co – investigator: Mohammadzadeh A (M.SC Student in bacteriology) .

Publication:

Mohammadzadeh A, Farnia P, Ghazvini K et al . Rapid and low-cost colorimetric method using 2,3,5,triphenyltetrazolium chloride for detection of multidrug –resistant mycobacterium tuberculosis . *J Med Microbiol*. 2006;55:1657-9

15) Title of Project

To asses the IS6110 stability in epidemiological studies

Principal Investigator : P. Farnia

Publication:

Farnia.P, Masjedi MR, Nasiri B etal . Instability of IS6110 paterns in multidrug-resistant strains of Mycobacterium tuberculosis .*Epidemiol Infect.*2007.35:346-52.

16) Title of Project

Molecular analysis of INH &RF resistance in Mycobacterium .tuberculosis

Principal Investigators : A.Khosarvei &P.Farnia

Co-investigator: Doustar .F

Publication:

Doustdar F, Khosravi AD, Farnia P, Masjedi MR, Velayati AA. Molecular analysis of isoniazid resistance in different genotypes of Mycobacterium tuberculosis isolates from Iran. *Microb Drug Resist.* 2008 Dec;14(4):273-9.

17) Title of Project

standardized treatment appropriate for non-XDR multiple drug resistant tuberculosis cases: A clinical descriptive study.

Principal -investigator: Tabarsi .P

Publication:

Is standardized treatment appropriate for non-XDR multiple drug resistant tuberculosis cases? A clinical descriptive study.Tabarsi P, Baghaei P, Jalali S, Farnia P, etal.*Scand J Infect Dis.* 2009;41(1):10-3.

18) Title of Project

The Tuberculosis transmission among Iranian & Afghani patients .

Publication:

The recent-transmission of Mycobacterium tuberculosis strains among Iranian and Afghan relapse cases: a DNA-fingerprinting using RFLP and spoligotyping. Farnia P, Masjedi MR, Varahram M, Mirsaeidi M, et al. *BMC Infect Dis.* 2008 Aug 6;8:10

19) Title of Project

Synthesis and evaluation of in vitro anti-tuberculosis activity of N-substituted glycolamides

Principal investigator: Daryae F, Kobarfard F,Farnia.P.

Publication:

Daryae F, Kobarfard F, Khalaj A, Farnia P. Synthesis and evaluation of in vitro anti-tuberculosis activity of N-substituted glycolamides.*Eur J Med Chem.* 2009;44:289-95.

20) Title of Project

Drug susceptbility patterns for drug selection design

Principal investigator : Tabarsi. P

Publication:

Tabarsi P, Nooraki A, Mirsaeidi M, Amiri M, Baghaei P, Farnia P et al. Representative drug susceptbility patterns for guiding design of re-treatment regimens for multidrug-resistant tuberculosis in Iran. *Respirology* . 2008 Jan; 13(1):108-11.