

## Curriculum Vitae



**First name:** Masoomeh    **Surname:** Shams-Ghahfarokhi

### University Qualifications:

1. **B.Sc. in Microbiology:** Isfahan University, Faculty of Sciences, Iran
2. **M.Sc. in Microbiology:** Tarbiat Modares University, Faculty of Medical Sciences, Iran. "Title of thesis: *Evaluation of A. fumigatus antigens in induction of humoral immunity in experimental models*".
3. **Ph.D. in Mycology:** Tarbiat Modares University, Faculty of Medical Sciences, Iran. "Title of thesis: *Comparison of antigenic structure of Microsporum canis and M. equinum and their role in humoral and cellular responses in human and animal models*".
4. **JSPS Post-Doc fellowship:** Department of Metabolic Regulation Laboratory, National Food Research Institute, Tsukuba, Japan. Research title "*Purification and identification of antifungal and anti-aflatoxin compounds from soil organisms.*"

### Current address:

Department of Mycology, Faculty of Medical Sciences, Tarbiat Modares University, Tehran, 1411713116, Iran.

Cell phone: 09128049078

Phone: +98 (21) 82884505

Fax: +98 (21) 82884555

E-mail address: shamsm@modares.ac.ir & mshamsgh@yahoo.com

### Experiences and Research Interest:

I have extensive experiences on molecular biology of microbial organisms such as fungal yeasts and molds (*Candida albicans*, *Cryptococcus neoformans*, *Aspergillus* spp.), morphogenesis, purification and identification of microbial metabolites and antifungal

compounds, enzyme and protein manipulation, molecular mechanism of microbial pathogenesis, chemical biology screening test and antifungal drug susceptibility testing (CLSI methods and so on), and mycotoxin analytical skills such as TLC, HPLC and LC-MS, standard techniques of molecular and cell biology (such as cell culture, DNA/RNA purification, purifying RNA protein complexes and analyzing their composition and structure, Real Time-PCR, cDNA cloning, sequencing,...), biochemistry ( such as ELISA, LTT, Column Chromatography,...), electron microscopy. Also, I have good experiences in cell infection models, flow cytometry and working with animal (such as Mouse, Rat, Rabbit, Sheep and Goat). Southern blot hybridization, Western blot hybridization PCR, RAPD-PCR, Primer Design Restriction Fragment Length Polymorphism (RFLP), Amplified Fragment Length Polymorphism (AFLP), Gene cloning and expression, Sequence analysis, probe design.

I am interested in investigating on novel therapeutic strategies for life-threatening infectious diseases, through deciphering mechanisms underpinning microbial drug resistance, development, virulence factors, and innovative approach for new antimicrobial drugs on tissue on chip technique and also, molecular diagnostic methods for diagnosis of microbial drug resistance and their toxic metabolites.

**Training course:**

1. Molecular cloning workshop, 11-14 March 2004. Pasteur Institute of Iran, Tehran, Iran.
2. Proteomics workshop, 13-18 September 2004, Pasteur Institute of Iran, Tehran, Iran.
3. ICC10 training course for “Sample preparation for scanning Electron Microscope (SEM) and Field Emission SEM observation”, 16-18 October 2004, National Institute for Environmental Studies (NIES), Tsukuba, Japan.

**Awards:**

1. Young Scientists Award from Chinese Congress of Clinical Chemistry & Laboratory Medicine 2000, 11 – 15 June 2000, Hong Kong, China.
2. Young Scientists Award from The 7th International Mycological Congress, 11 – 17 August 2002, Oslo, Norway.

3. Young Scientists Award from 10th International Congress of Culture Collections (ICCC-10), 10-15 October 2004, Tsukuba, Japan.

**Molecular microbiology skills:**

- Sequencing • Expression of genes using different methods of Q-PCR (real-time PCR) • PCR, RT-PCR and real-time PCR • Enzyme assays • Southern Blotting, Northern • Blotting and Western Blotting • Cloning • Bioinformatics research using bioinformatics tools • DNA and RNA isolation and making cDNA library • Gel Electrophoresis • RACE PCR to find the transcriptional start points • Column chromatography • HPLC • TLC • LC-MS • RNA isolation and making cDNA by manual method and kit • Gel electrophoresis • Fermentation • Gel purification

**Bioinformatics skills:**

- Gene Finder programme for identification and evaluation of sequences • Reverse and Compliment programme for comparing reverse and forward strand • VecScreen programme for checking of contaminated sequences with Vector • ExPasy software for translation DNA-to-protein • Oligos (for primer design) • BLAST programmes • NCBI Blast • Relationship Tree • Gene Scan • Multiple Alignment • Genotyper • DNA Sequencing Analysis • Sequence Navigator

**Microbiology laboratory skills:**

- ELISA • Protein purification • Preparation of tissue sections and staining • Antibigram • Microscopic examinations • Staining of samples • Tissue and cell cultures • Growing of bacteria and fungi in different laboratory media for isolation and identification of fungi and bacteria • Shake flasks running

**Editorial Board Membership:**

1. Frontiers in Microbiology
2. Current Medical Mycology
3. Indian Research Journal of Pharmacy and Science
4. Journal of Biological Sciences
5. AS Microbiology
6. ARC Journal of Pharmaceutical Sciences

**Publications:**

**Book:**

1. **Shams-Ghahfarokhi, M.**, Alinezhad, S. and Razzaghi Abyaneh, M. *Marine Mycology and Mycotic Diseases*, Ministry of Jihad Agriculture Publ., First Edition, (192 pages in Persian), 2005.
2. Razzaghi Abyaneh, M. and **Shams-Ghahfarokhi, M.** *Veterinary General Mycology*, Ministry of Jihad Agriculture Publ., (420 pages in Persian), 2005.
3. Razzaghi Abyaneh, M. and **Shams-Ghahfarokhi, M.** *Veterinary Mycotic Diseases*, Ministry of Jihad Agriculture Publ., (250 pages in Persian), 2005.
4. Razzaghi-Abyaneh, M., Pilehvar-Soltanahmadi, Y., **Shams-Ghahfarokhi, M.**, Alinezhad, S. *Aflatoxins: Public Health and Agricultural Significance*. Ministry of Jihad Agriculture Publ., First Edition, (216 pages in Persian), 2011.
5. Razzaghi-Abyaneh M., **Shams-Ghahfarokhi M.**, Rezaee MB., Sakuda S. *Natural Aflatoxin Inhibitors from Medicinal Plants*. In: *Mycotoxins in Food, Feed and Bioweapons*. Mahendra Rai, Ajit Varma (eds). Springer-Verlag Berlin Heidelberg 2010. pp: 329-352.
6. Razzaghi-Abyaneh, M., **Shams-Ghahfarokhi, M.**, Chang, P.-K. *Aflatoxins: Mechanisms of Inhibition by Antagonistic Plants and Microorganisms*. **In:** *Aflatoxins: Biochemistry and molecular Biology* (Ramon G. Guevara-Gonzalez, eds.), INTECH Open Access Publisher, pp. 285-304, 2011.
7. Razzaghi-Abyaneh, M., **Shams-Ghahfarokhi, M.** *Natural Inhibitors of Food-borne Fungi from Plants and Microorganisms*. **In:** *Natural Antimicrobials in Food Safety and Quality* (M. Rai, M. Chikindas, eds.), CABI Publisher, October 2011.
8. **Shams-Ghahfarokhi M.**, Kalantari S., Razzaghi-Abyaneh M. (2013). *Terrestrial Bacteria from Agricultural Soils: Versatile Weapons against Aflatoxigenic Fungi*. In: Razzaghi-Abyaneh, M. *Aflatoxins: Recent Advances and Future Prospects*. INTECH Open Access Publisher. (ISBN 978-953-51-0904-4).
9. Razzaghi-Abyaneh M., **Shams-Ghahfarokhi M.**, Rai M. (2013) *Antifungal Plants of Iran: An Insight into Ecology, Chemistry, and Molecular Biology*. In: Razzaghi-Abyaneh M., Rai M. (eds) *Antifungal Metabolites from Plants*. Springer, Berlin, Heidelberg. Doi: 10.1007/978-3-642-38076-1\_2.
10. Razzaghi-Abyaneh, M., **Shams-Ghahfarokhi, M.** (2015). *Medical Mycology Current Trends and Future Prospects*, First edition. CRC Press., Pp: 442. (ISBN-10:1498714218, ISBN-13:978-1498714211).

11. Gholami-Shabani M., **Shams-Ghahfarokhi M.**, Gholami-Shabani Z., Razzaghi-Abyaneh M. (2016) *Microbial Enzymes: Current Features and Potential Applications in Nanobiotechnology*. In: Prasad R. (eds) *Advances and Applications Through Fungal Nanobiotechnology*. Fungal Biology. Springer, Cham. DOI 10.1007/978-3-319-42990-8\_5.
12. Asghari-Paskiabi F., Jahanshiri Z., Imani M., **Shams-Ghahfarokhi M.**, Razzaghi-Abyaneh M. (2016) *Antifungal nanomaterials: Synthesis, properties, and applications*. In: Grumezescu A. (ed) *Nanobiomaterials in Antimicrobial Therapy*. Elsevier Inc. doi.org/10.1016/B978-0-323-42864-4.00010-5.
13. Gholami-Shabani M., **Shams-Ghahfarokhi M.**, Gholami-Shabani Z., Razzaghi-Abyaneh M. (2017) *Green Nanotechnology: Biomimetic Synthesis of Metal Nanoparticles Using Plants and Their Application in Agriculture and Forestry* title. In: R. Prasad et al. (eds). *Nanotechnology*. Springer. DOI: 10.1007/978-981-10-4573-8\_8.
14. Gholami-Shabani M., Zamani S., Moosa H., **Shams-Ghahfarokhi M.**, Jamzivar F., Razzaghi-Abyaneh M. (2018) *Recent Advances in Fungal Infections of the Central Nervous System: From Etiology to Diagnosis and Management*. In: *The Microbiology of Central Nervous System Infections*. K Kon, M Rai (eds). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-813806-9.00012-3>.
15. **Shams-Ghahfarokhi M.**, (2019) *Antifungal Drugs: Challenges, Clinical Aspects and New Approaches*. TMU press. Pp: 379 (Persian, ISBN: 978-600-7589-95-3).
16. Gholami-Shabani M., **Shams-Ghahfarokhi M.**, Razzaghi-Abyaneh M. (2019) *Natural Product Synthesis by Fungi: Recent Trends and Future Prospects*. In: Yadav A., Singh S., Mishra S., Gupta A. (eds) *Recent Advancement in White Biotechnology Through Fungi*. Fungal Biology. Springer, Cham. [https://doi.org/10.1007/978-3-030-14846-1\\_7](https://doi.org/10.1007/978-3-030-14846-1_7)
17. Asghari-Paskiabi F., Jahanshiri Z., **Shams-Ghahfarokhi M.**, Razzaghi-Abyaneh M. (2020) *Antifungal Nanotherapy: A Novel Approach to Combat Superficial Fungal Infections*. In: Rai M. (eds) *Nanotechnology in Skin, Soft Tissue, and Bone Infections*. Springer, Cham. [https://doi.org/10.1007/978-3-030-35147-2\\_5](https://doi.org/10.1007/978-3-030-35147-2_5).

#### Papers:

1. **Shams-Ghahfarokhi M.**, Khosravi A., Vojgani H. (1992) Purification of *Aspergillus fumigates* cytoplasmic and cell wall antigens and detection of antibodies. *Gashtac Journal*, 2(2):172-5.

2. **Shams-Ghahfarokhi M.**, Khosravi A., Rassae M.J., Mahmoudi M., Razzaghi, M. (1999). SDS-Page separation of *dermatophyte* antigens and western blotting in experimental animal model and human dermatophytosis. *Kowsar Medical Journal*, 4(4):229-5.
3. **Shams-Ghahfarokhi M.**, Rassae M.J., Moosavi M., and Razzaghi-Abyaneh M. (2001). Identification of *Malassezia* species in patients with pityriasis versicolor submitted to the Razi Hospital in Tehran. *Iranian Biomedical Journal* 5 (4): 121–6.
4. Allameh, A., Razzaghi-Abyaneh, M., **Shams, M.**, Rezaee, M.B., and Jaimand, K. (2001) Effect of neem leaf extract on production of aflatoxins and activities of fatty acid synthetase , isocitrate dehydrogenase, and glutathione S-transferase in *Aspergillus parasiticus*. *Mycopathologia* 154(2): 79 – 84.
5. **Shams-Ghahfarokhi, M.**, Razafsha, M., Allameh, A., and Razzaghi-Abyaneh, M. (2003) Inhibitory effects of aqueous onion and garlic extracts on growth and keratinase activity in *Trichophyton mentagrophytes*. *Iranian Biomedical Journal* 7(3): 113-8.
6. **Shams-Ghahfarokhi M.**, Refae J., Allameh A., and Razzaghi-Abyaneh M. (2004) Effects of aqueous and essential oil of onion (*Allium cepa*) on growth and lipase activity in *Malassezia furfur*. *Daneshvar Medicine* 11(52):31-8.
7. **Shams-Ghahfarokhi, M.**, Fazli, A., Lotfi, A., and Razzaghi-Abyaneh, M. (2004) Cellobiose dehydrogenase production by the genus Cladosporium. *Iranian Biomedical Journal* 8 (2): 107-11.
8. **Shams-Ghahfarokhi, M.**, Razzaghi-Abyaneh, M., Bahadori, S., Eslami, A., Zare, R., and Ebrahimi, M. (2004) Screening of soil and sheep faecal Samples for predacious fungi: isolation and characterization of a nematode-trapping fungus *Arthrobotrys oligospora*. *Iranian Biomedical Journal* 8 (3): 135-42.
9. **Shams Ghahfarokhi, M.**, and Razzaghi-Abyaneh, M. (2004) Rapid identification of *Malassezia furfur* from other *Malassezia* species: A major causative agent of pityriasis versicolor. *Iranian Journal of Medical Sciences* 29 (1): 36-9.
10. **Shams Ghahfarokhi, M.**, Goodarzi, M., Razzaghi-Abyaneh, M., Al-Tiraihi, T., and Seyedipour, G. (2004) Morphological evidences for onion-induced growth inhibition of *Trichophyton rubrum* and *Trichophyton mentagrophytes*. *Fitoterapia* 75: 645-5.
11. Razzaghi-Abyaneh M., Allameh A., Al-Tarihi T., **Shams-Ghahfarokhi M.**, Ghorbanian M. (2005) Morphological alterations in toxigenic *Aspergillus parasiticus*

- exposed to neem (*Azadirachta indica*) leaf and seed aqueous extracts. *Mycopathologia* 159: 565-70.
12. Ghorbanian M, Razzaghi-Abyaneh, M., Allameh, A., **Shams-Ghahfarokhi, M., Babae GR.**, Rezaee, M.B. (2005) Effect on incubation time on *Aspergillus parasiticus* growth and its aflatoxin productivity in presence of neem (*Azadirachta indica* A. juss) *Hakim Medical Journal* 8(3) :54-60.
  13. **Masoomeh Shams-Ghahfarokhi** ., Mohammad-Reza Shokoohamiri ., Nasrin Amirrajab ., Behnaz Moghadasi ., Ali Ghajari ., Farideh Zeini ., Golnar Sadeghi ., Mehdi Razzaghi-Abyaneh .(2006) In vitro antifungal activities of *Allium cepa*, *Allium sativum* and ketoconazole against some pathogenic yeasts and dermatophytes. *Fitoterapia* 77:321-3.
  14. **Shams Ghahfarokhi M.**, Shokoohamiri MR., Sadeghi G., Razzaghi Abyaneh M. and Mirzahoseini H (2006) Comparative study of the effect of antifungal drugs terbinafine and ketoconazole against *Malassezia furfur* isolates. *Daneshvar Medicine* 14(66):45-52
  15. **Shams-Ghahfarokhi M.**, Amirrajab N., Ghajari A., Razzaghi-Abyaneh M.(2006) Comparative study on In vitro antifungal activity of garlic (*Allium sativum*) ,onion (*Allium cepa*) and terbinafine against current dermatophytes species. *Daneshvar Medicine* 13(62):35-42
  16. Katirae F., Yadegari MH., **Shams-Ghahfarokhi M.**, Zarinkafsh H.(2006) Phenotypic diagnostic methods to distinguish of *Candida dubliniensis* from *C.albicans*. *Kowsar Medical Journal*, 10(4):247-54.
  17. Mehdi Razzaghi-Abyaneh. , **Masoomeh Shams-Ghahfarokhi.**, Abdolamir Allameh., Amirmohammad Kazeroon-Shiri., Shahrokh Ranjbar-Bahadori., Hasan Mirzahoseini., Mohammad-Bagher Rezaee.( 2006) A Survey on Distribution of *Aspergillus* Section Flavi in Corn Field Soils in Iran: Population Patterns Based on Aflatoxins, Cyclopiazonic Acid and Sclerotia Production *Mycopathologia* 161(3): 183 –92.
  18. Mehdi Razzaghi-Abyaneh. , **Masoomeh Shams-Ghahfarokhi.**, Ali Eslamifar., Oskar J. Schmidt., Reza Gharebaghi., Mehdi Karimian., Alireza Naseri., Mohammad Sheikhi. (2006) Inhibitory Effects of Akacid@plus on Growth and Aflatoxin Production by *Aspergillus parasiticus* . *Mycopathologia* 161(4): 245 –9.

19. Razzaghi-Abyaneh M, **Shams-Ghahfarokhi M**, Kawachi M, Eslamifar A, Schmidt OJ, Schmidt A, Allameh A, Yoshinari T. (2006) Ultrastructural evidences of growth inhibitory effects of a novel biocide, Akacid(plus), on an aflatoxigenic *Aspergillus parasiticus*. *Toxicon* 15;48(8):1075-82.
20. Amirrajab N., **Shams-Ghahfarokhi M**. Ghajari A., Razzaghi-Abyaneh M.(2006) In vitro antifungal activities of griseofulvin and terbinafine against common dermatophytes. *Hakim Medical Journal* 9(1) :28-33.
21. Khodadad Pirali-Kheirabadi .,Hamidreza Haddadzadeh ., Mehdi Razzaghi Abyaneh ., Saeed Bokaie ., Rasoul Zare ., Mehran Ghazavi .,**Masoomesh Shams-Ghahfarokhi**. (2007). Biological control of *Rhipicephalus (Boophilus) annulatus* by different strains of *Metarhizium anisopliae*, *Beauveria bassiana* and *Lecanicillium psalliotae* fungi. *Parasitology Research* 100(6):1297-302.
22. Razzaghi-Abyaneh, M., Tomoya, Y., **Shams-Ghahfarokhi, M.**, Rezaee, M.B., Nagasawa, H., Sakuda, S. (2007). Dillapiol and apiol as specific inhibitors of the biosynthesis of aflatoxin G<sub>1</sub> in *Aspergillus parasiticus*. *Bioscience, Biotechnology and Biochemistry* 71(9):2329-32.
23. Mohammadi R., Yadegari MH., Moattar F., **Shams M**. (2006) Antifungal activity of *Boswellia serrata's* essential oil against fluconazole resistant and susceptible isolates of *Candida albicans*. *Medical Journal of Isfahan*. 24(82):30-5.
24. Ghorbanian M, Razzaghi-Abyaneh, M., Allameh, A., **Shams-Ghahfarokhi, M.**,Qorbani M. (2007). Study on the effect of neem (*Azadirachta indica* A. juss) leaf extract on the growth of *Aspergillus parasiticus* and production of aflatoxin by it at different incubation times. *Mycoses* 51:35-9
25. Razzaghi-Abyaneh, M., **Shams-Ghahfarokhi, M.**, Yoshinari T.,Rezaee, MB.,Jaimand K., Nagasawa, H., Sakuda, S. (2008). Inhibitory effects of *Satureja hortensis* L. essential oil on growth and aflatoxin production by *Aspergillus parasiticus*. *International Journal of Food Microbiology* 123 : 228–3
26. **Shams-Ghahfarokhi, M.**, Ammanloo S., Forouzandemoghadam M.,Mirzahoseini H. (2007). Identification and diagnosis of common *Malassezia* species by PCR-RFLP in IRAN. *Modares Medical journal* 9(1):37-43.



27. Nemati-Shirzi L., **Shams-Ghahfarokhi, M.** Yadegari MH. (2008). Evaluation of Disk Diffusion and Broth Microdilution Methods for Fluconazole Susceptibility Testing in one Group of *Candida* spp. in Tehran. *Daneshvar Medicine* 15(73): 51-8.
28. **Shams-Ghahfarokhi, M.**, Razzaghparast A., Yadegari MH., Razzaghi-Abyaneh, M. (2008). Antifungal effects of fluconazole, itraconazole and ketoconazole in intact and combination forms against some pathogenic yeasts. *Ofogh danesh (Medical Journal of Gonabad university)*, 13(4):29-39.
29. Razzagh-Parast, A., **Shams-Ghahfarokhi, M.** Yadegari MH., Razzaghi-Abyaneh, M. (2008). Antifungal effects of allium cepa and some azoles in intact forms and in combinations to each other against pathogenic yeasts. *Kowsar Medical Journal* , 13(2): 103-14.
30. Zare, M., **Shams-Ghahfarokhi, M.**, Allameh, A., Ranjbar-Bahadori, S., and Razzaghi-Abyaneh, M. (2008). Comparative Study of the Major Iranian Cereal Cultivars and some Selected Spices in relation to Support *Aspergillus parasiticus* Growth and Aflatoxin Production. *Iranian Biomedical Journal* , 12(4) :229-36.
31. Mirzahoseini H., Omidiniya E., **Shams-Ghahfarokhi, M.**, Sadeghi G., Razzaghi-Abyaneh, M. (2009). Application of PCR-RFLP to rapid identification of the main pathogenic dermatophytes from clinical specimens. *Iranian Journal of Public Health* 38(1) :18-24.
32. Moghaddasi B., **Shams-Ghahfarokhi M.**, Zeini F., Razzaghi-Abyaneh M. In vitro antifungal effects of ketoconazole against clinical isolates of *Candida* from vulvovaginal candidiasis. *Daneshvar Medical Journal*, 2009; 16 (78): 75-82.
33. Razzaghi-Abyaneh, M., **Shams-Ghahfarokhi, M.**, Rezaee, M.-B., Jaimand, K., Alinezhad, S., Saberi, R., Yoshinari, T. (2009). Chemical composition and antiaflatoxic activity of *Carum carvi* L., *Thymus vulgaris* and *Citrus aurantifolia* essential oils. *Food Control* 20(2009): 1018-24.
34. Shahrokh Bagheri-Gavkosh, Mohsen Bigdeli, **Masoomeh Shams-Ghahfarokhi** and Mehdi Razzaghi-Abyaneh. (2009). Inhibitory Effects of *Ephedra major* Host on *Aspergillus parasiticus* Growth and Aflatoxin Production. *Mycopathologia*. 168: 249-55.
35. **Shams-Ghahfarokhi M** , Mosleh-Tehrani F, Ranjbar-Bahadori S, Razzaghi-Abyaneh M. (2010). An epidemiological survey on cattle ringworm in major dairy farms of Mashhad city, Eastern Iran. *Iranian Journal of Microbiology*. 1(3):31-6.

36. Marziyeh Tolouee , Soheil Alinezhad , Reza Saberi , Ali Eslamifar , Seyed Javad Zad , Kamkar Jaimand ,Jaleh Taeb , Mohammad-Bagher Rezaee , Masanobu Kawachi , **Masoomeh Shams-Ghahfarokhi** , Mehdi Razzaghi-Abyaneh. (2010). Effect of *Matricaria chamomilla* L. flower essential oil on the growth and ultrastructure of *Aspergillus niger* van Tieghem. *International Journal of Food Microbiology*. 139(2010): 127–33.
37. Shahrokh Ranjbar-Bahadori, Mehdi Razzaghi-Abyaneh, Mansour Bayat, Ali Eslami, Khodadad Pirali, **Masoomeh Shams-Ghahfarokhi** and Samad Lotfollahzadeh. Studies on the Effect of Temperature, Incubation Time and *in vivo* Gut Passage on Survival and Nematophagous Activity *Arthrobotrys oligospora* Var. *Oligospora* and *A. cladodes* Var. *Macroides*. *Global Veterinaria* 2010; 4 (2): 112-17.
38. Soheil Alinezhad, Azizollah Kamalzadeh, **Masoomeh Shams-Ghahfarokhi**, Mohammad-Bagher Rezaee, Kamkar Jaimand, Masanobu Kawachi, Zahra Zamani, Reza Tolouei, Mehdi Razzaghi-Abyaneh. Search for novel antifungals from 49 indigenous medicinal plants: *Foeniculum vulgare* and *Platycladus orientalis* as strong inhibitors of aflatoxin production by *Aspergillus parasiticus*. *Ann Microbiol* 2011; 61: 673-681.
39. S. Alinezhad , M. Tolouee , A. Kamalzadeh , A. A. Motalebi , M. Nazeri , M. Yasemi, **M. Shams-Ghahfarokhi**, R. Tolouei , M. Razzaghi-Abyaneh. Mycobiota and aflatoxin B1 contamination of rainbow trout (*Oncorhynchus mykiss*) feed with emphasis to *Aspergillus* section Flavi  
*Iranian Journal of Fisheries Sciences* 2011; 10 (3): 363-374.
40. Asghar Sepahvand, **Masoomeh Shams-Ghahfarokhi**, Zahra Jahanshiri, Mojde Jamali Abdolamir Allameh, Mehdi Razzaghi-Abyaneh. A survey on distribution and toxigenicity of *Aspergillus flavus* from indoor and outdoor hospital environments. *Folia Microbiologica* 2011; 56 (6): 527-534. DOI 10.1007/s12223-011-0078-1.
41. G. Sadeghi, M. Abouei, M. Alirezaee, R. Tolouei, **M. Shams-Ghahfarokhi**, E. Mostafavi, M. Razzagh-Abyaneh. A 4-year survey of dermatomycoses in Tehran from 2006-2009. *Journal de Mycologie Medicale* 2011; 21 (4): 260-265.
42. Alireza Ranjbariyan, **Masoomeh Shams-Ghahfarokhi**, Sanaz Kalantari, Mehdi Razzaghi-Abyaneh. Molecular identification of antagonistic bacteria from Tehran soils and their inhibitory activities toward pathogenic fungi. *Iranian Journal of Microbiology* 2011; 3 (3): 140-146.

43. Jamali M, Ebrahimi M A, Karimipour M, **Shams-Ghahfarokhi M**, Dinparast-Djadid N, Kalantari S, Pilehvar-Soltanahmadi Y, Amani A, Razzaghi-Abyaneh M. An insight into the distribution, genetic diversity, and mycotoxin production of *Aspergillus* section Flavi in soils of pistachio orchards. *Folia Microbiol* 2012; 57(1): 27-36.
44. Z Jahanshiri, **M Shams-Ghahfarokhi**, A Allameh, M Razzaghi-Abyaneh. Effect of curcumin on *Aspergillus parasiticus* growth and expression of major genes involved in the early and late stages of aflatoxin biosynthesis. *Iranian J Publ Health* 2012; 41(6):72-79.
45. Saeedeh Amani, **Masoomeh Shams-Ghahfarokhi**, Maryam Banasaz, Mehdi Razzaghi-Abyaneh. Mycotoxin-producing ability and chemotype diversity of *Aspergillus* section Flavi from soils of peanut-growing regions in Iran. *Indian J Microbiology* 2012; 52(4): 551-556.
46. Asghar Sepahvand, **Masoomeh Shams-Ghahfarokhi**, Abdolamir Allameh, Mehdi Razzaghi-Abyaneh. Diversity and distribution patterns of airborne microfungi in indoor and outdoor hospital environments in Khorramabad, Southwest Iran. *Jundishapur Journal of Microbiology* 2013; 6(2): 186-192.
47. Jamali M, Karimipour M, **Shams-Ghahfarokhi M**, Amani A, Razzaghi-Abyaneh M. Expression of aflatoxin genes aflO (omtB) and aflQ (ordA) differentiates levels of aflatoxin production by *Aspergillus flavus* strains from soils of pistachio orchards. *Res Microbiol* 2013; 164(4): 293-9.
48. Jamalian A., **Shams-Ghahfarokhi M.**, Jaimand K., Pashootan N., Amani A., Razzaghi-Abyaneh M. Chemical composition and antifungal activity of *Matricaria recutita* flower essential oil against medically important dermatophytes and soil-borne pathogens. *Journal de Mycologie Medicale* 2012; 22: 308-315.
49. Erami M., **Shams-Ghahfarokhi M.**, Jahanshiri Z., Sharif A., Razzaghi-Abyaneh M. Rhinocerebral mucormycosis due to *Rhizopus oryzae* in a diabetic patient: A case report. *Journal de Mycologie Medicale* 2013; 23: 123-129.
50. Razzaghi-Abyaneh M, Saberi R, Sharifan A, Rezaee MB, Seifili R, Hosseini SI, **Shams-Ghahfarokhi M**, Nikkhah M, Saberi I, Amani A. Effects of *Heracleum persicum* ethyl acetate extract on the growth, hyphal ultrastructure and aflatoxin biosynthesis in *Aspergillus parasiticus*. *Mycotoxin Res.* 2013; 29: 261-269.

51. Fardis Teifoori, **Masoomeh Shams-Ghahfarokhi**, Ali Eslamifar; Maryamossadat Moinazad-Tehrani, Parisa Mashayekhi, Mehdi Razzaghi-Abyaneh. Study on the Role of *Alternaria alternata* in the etiology of allergic asthma in patients admitted to Loghman hospital by using the skin prick test and solid-phase immunoassay. *Modares Journal of Medical Sciences: Pathobiology* 2013, 16 (2): 1-12.
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