

Curriculum Vita



First Name: Afsane

Last Name: Vaezi

PhD in Medical Mycology

Department of Medical Laboratory Science, School of Allied Medical Sciences, Iran University of Medical Sciences, Tehran, Iran

Email: vaeziiafsane@gmail.com

Educational Background:

2011-2013: MSc: Medical Mycology. Mazandaran University of Medical Sciences, Sari, Iran

2014-2018: PhD student in medical mycology, Departments of Medical Mycology, Mazandaran University of Medical Sciences, Sari-Iran

Research experiences and fields of interest:

Epidemiological surveillance study.

In vitro activities of antimicrobials (alone or in combination) against clinical fungi based on CLSI broth microdilution, E test and checkerboard assay.

In vivo antifungal activities in murine model infection.

Early diagnosis assays based on conventional e.g., micro-culture and molecular method.

Evolution of pathogenicity of fungal.

The mechanism of drug resistance.

The evolution of azole resistance and measures to prevent the emergence of multiple-azole-resistant.

Honors and Awards:

The top-rated PhD entrance exam in 2014 in Iran. (Number one).

The member of Iran's National Elites Foundation.

Top researcher at Mazandaran university medical sciences January, 2018.

Top student in the university (Top talent in the university).

Member of the European Society of Clinical Microbiology and Infection Disease (ESCMID).

FEMS young investigators travel award worth 600 Euro for an outstanding presentation at the 7th Conference of Medical Microbiology (FEMS) July 9-13, 2017, Valencia, Spain.

ESCMID Observership, 1700 EUR (ID1164), France, Nacker Hospital for one month.

Publications

1. Vaezi A, Walther G, Kurzai O, Mahdi D, Dadashzade M, Nasri E, Diba K, Badali H, Fakhim H. Frequency of occurrence, seasonal variation and antifungal susceptibility of opportunistic Mucorales isolated from hospital soils in Iran. *Mycoses*. 2021 Apr 9. <https://doi.org/10.1111/myc.13283>.
 2. Vaezi A, Fakhim H, Abtahian Z, Geramishoar M, Khodavaisy S, Alizadeh A, Meis JF, Badali H. Frequency and geographic distribution of CARD9 mutations in patients with severe fungal infections. *Front Microbiol*. 2018; doi: 10.3389/fmicb.2018.02434.
 3. Afsane Vaezi, Hamed Fakhim, Macit Ilkit, Leila Faeli, Mahdi Fakhar, Vahid Alinejad, Nathan P. Wiederhold & Hamid Badali. Rapid and low-cost culture-based method for diagnosis of mucormycosis using a mouse model. *Front Microbiol*. 2020. Doi: 10.3389/fmicb.2020.00440.
 4. Vaezi A, Fakhim H, Arastehfar A, Shokohi T, Hedayati MT, Khodavaisy S, Rezaei-Matehkolaei A, Badiie P, Hagen F, Lass-Flörl C, Dannaoui E, Meis JF, Badali H. In vitro antifungal activity of amphotericin B and eleven comparators against *Aspergillus terreus* species complex. *Mycoses*. 2017 Oct 24. doi: 10.1111/myc.12716. [Epub ahead of print] PubMed PMID: 29064123.
 5. Vaezi A, Moazeni M, Rahimi MT, de Hoog S, Badali H. Mucormycosis in Iran: a systematic review. *Mycoses*. 2015, doi:10.1111/myc.12474.
 6. Arastehfar A, Fang W, Badali H, Vaezi A, Jiang W, Liao W, et al. Low-Cost Identification for the Global Spreading Multi-drug Resistant Superbug Fungus, *Candida auris* and its phylogenetic relatives. *Front Microbiol*. 2018; 9:1119. doi: 10.3389/fmicb.2018.01119.
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7. K. Pakshir , H. Fakhim , A. Vaezi, J.F. Meis, M. Mahmoodi, K. Zomorodian, J. Javidnia, S. Ansari, F. Hagen, H. Badali. Molecular epidemiology of environmental *Cryptococcus* species isolates based on amplified fragment length polymorphism. *Journal de Mycologie Me´dicale* 28 (2018) 599–605. <https://doi.org/10.1016/j.mycmed.2018.09.005>.
 8. Diba K, Makhdoomi K, Nasri E, Vaezi A, Javidnia J, Jabbari Gharabagh D, et al. Emerging *Candida* species isolated from renal transplant recipients: Species distribution and susceptibility profiles. *Microbial Pathogenesis*. 2018. Doi: 10.1016/j.micpath.2018.09.026.
 - 9.
 10. Fakhim H, Vaezi A, Javidnia J, Nasri E, Mahdi D, Diba K, Badali H. *Candida africana* vulvovaginitis: Prevalence and geographical distribution. *J Mycol Med*. 2020 Apr 5:100966. doi: 10.1016/j.mycmed.2020.100966.
 11. Fakhim, H., Vaezi A, A., Dannaoui, E., et al. In vitro combination of voriconazole with micafungin against azole-resistant clinical isolates of *Aspergillus fumigatus* from different geographical regions. *Diagnostic Microbiology and Infectious Disease*. 2018.
 12. Fakhim H, Emami S, Vaezi A, Hashemi SM, Faeli L, Diba K, et al. In Vitro Activities of Novel Azole Compounds (ATTAF-1 and ATTAF-2) Against Fluconazole-Susceptible and -Resistant Isolates of *Candida* species. *Antimicrob Agents Chemother*. 2016.
 13. Fakhim H, Vaezi A, Dannaoui E, Chowdhary A, Nasiry D, Faeli L, Meis JF, Badali H. Comparative virulence of *Candida auris* with *Candida haemulonii*, *Candida glabrata* and *Candida albicans* in a murine model. *Mycoses*. 10.1111/myc.12754.
 14. Badali H, Vaezi A, Haghani I, Yazdanparast SA, Hedayati MT, Mousavi B, et al. Environmental study of azole-resistant *Aspergillus fumigatus* with TR34/L98H mutations in the *cyp51A* gene in Iran. *Mycoses*. 2013;56(6):659-63.
 15. Badali, Fakhim H, Zarei F, Nabili M, Vaezi A, Poorzad N, Dolatabadi S, Mirhendi H, In Vitro Activities of Five Antifungal Drugs Against Opportunistic Agents of *Aspergillus Nigri* Complex. *Mycopathologia*, DOI 10.1007/s11046-015-9968-0.
 16. Vaezi A, Fakhim H, Khodavaisy S, Alizadehd A, Nazeri M, Razzaghif R, Boekhoutg T, Badali H. Epidemiological and mycological characteristics of candidemia in Iran: A systematic review and meta-analysis. *J Mycol Med* 2017.
 17. Vaezi A, Fakhim H, Javidnia J, Mohsenid S, Nourbakhsh F, Badali H. Pesticide behavior in Paddy fields and development of azole resistance *Aspergillus fumigatus*: should we be concerned? de
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Mycologia 2017. <https://doi.org/10.1016/j.mycmed.2017.12.007>.

18. Motahari K, Badali H, Hashemi SM, Fakhim H, Mirzaei H, Vaezi A, et al. Discovery of benzylthio analogs of fluconazole as potent antifungal agents. 2018 <https://doi.org/10.4155/fmc-2017-0295>.
 19. In Vitro Interactions of Echinocandins with Triazoles Against Multidrug-Resistant *Candida auris*. Fakhim H, Chowdhary A, Prakash A, Vaezi A, Dannaoui A, Meis J, Badali H. Antimicrob Agents Chemother. 2017. 24;61(11). pii: e01056-17. doi: 10.1128/AAC.01056-17.
 20. Falahatinejad M, Vaezi A, Fakhim H, Abastabar M, Shokohi T, Zahedi N, Ansari S, Meis JF, Badali H. Use of CSP typing for genotyping of azole-resistant and -susceptible *Aspergillus fumigatus* isolates in Iran. Mycoses. 2017 Oct 24. doi:10.1111/myc.12717. [Epub ahead of print] PubMed PMID: 29064130.
 21. In Vitro Activity of Luliconazole, Lanconazole, and Efinaconazole Compared with Five Antifungal Drugs Against Melanized Fungi and Relatives. Shokoohi GR, Badali H, Mirhendi H, Ansari S, Rezaei-Matehkolaei A, Ahmadi B, Vaezi A, Alshahni MM, Koichi Makimura. Antimicrob Agents Chemother. 2017.
 22. Rezai MS, Vaezi A, Fakhim H, Soleimani A, Mohammad Jafari H, M. ohseni S, Badali H. Successful treatment with caspofungin of candiduria in a child with Wilms tumor; review of literature. J Mycol Med. 2017 Feb 7. pii: S1156-5233(16) 30200-1. doi: 10.1016/j.mycmed.2017.01.006.
 23. Elahe Nasri, Hamed Fakhim, Afsane Vaezi, Soheila Khalilzadeh, Fatemeh Ahangarkani, Melika Laal kargar, Zahra Abtahian, Hamid Badali. Airway Colonization by Candida and Aspergillus species in Iranian Cystic Fibrosis Patients. Mycoses. 2019 Jan 25. doi: 10.1111/myc.12898.
 24. Badali H, Al-Hatmi AMS, Fakhim H, Moghaddasi A, Khodavaisy S, Vaezi A, Ahangarkani F, de Hoog GS, Meis JF. In vitro activity of nine antifungal agents against a global collection of Hortaea werneckii isolates, the agent of tinea nigra. Int J Antimicrob Agents. 2019 Jul;54(1):95-98. doi: 10.1016/j.ijantimicag.2019.05.006. Epub 2019 May 7. PubMed PMID: 31071468.
 25. Mohammadi R, Mohammadi A, Ashtari F, Khorvash F, Hakamifard A, Vaezi A, Javidnia J, Meis JF, Badali H. Cerebral phaeohyphomycosis due to *Rhinocladiella mackenziei* in Persian Gulf region: A case and review. Mycoses. 2017. doi:10.1111/myc.12734.
 26. Hamed Fakhim, Afsane Vaezi, Javad Javidnia, Elahe Nasri, Diman Mahdi, Kambiz Diba, Hamid Badali. Candida africana Vulvovaginitis: Prevalence and Geographical Distribution. Journal de Mycologie Médicale. (2020).
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27. Zaynab Sadeghi-Ghadi, Afsane Vaezi, fatemeh ahangarkani, Pedram Ebrahimnejad. Hamid Badali. CUR-QUE-NV-WH: A nanovesicle with potent in vitro activity against resistant *Aspergillus* and *Candida* species. (2020).
 28. Nasri, E., Shoaie, P., Vakili, B., Mirhendi, H., Sadeghi, S., Hajiahmadi, S., Sadeghi, A., Vaezi, A., Badali, H., Fakhim, H. Fatal Invasive Pulmonary Aspergillosis in COVID-19 Patient with Acute Myeloid Leukemia in Iran. *Mycopathologia* (2020). <https://doi.org/10.1007/s11046-020-00493-2>.
 29. Nasri E, Shoaie P, Vakili B, Mirhendi H, Sadeghi S, Hajiahmadi S, Sadeghi A, Vaezi A, Badali H, Fakhim H. Fatal Invasive Pulmonary Aspergillosis in COVID-19 Patient with Acute Myeloid Leukemia in Iran. *Mycopathologia*. 2020 Dec;185(6):1077-1084. doi: 10.1007/s11046-020-00493-2. Epub 2020 Oct 3. PMID: 33009966; PMCID: PMC7532731.
 30. Badali H, Vaezi A, Aslani N, Zahedi N, Shiran MR. Overview of voriconazole pharmacokinetics and pharmacodynamic parameters. *J Mazandaran Univ Med Sci* 2016; 26(136): 225-235 (Persian). Scopus
 31. Rezai MS, Vaezi A, Fakhim H, Mohseni S, Faali L, Badali H. *Candida* Urinary Tract Infections; Treatment Protocol. *J Mazandaran Univ Med Sci* 2017; 26 (145): 421-432 (Persian). Scopus
 32. Vaezi A, Haghani I, Mohammad Davoudi M, Mousavi B, Ansari S, Noshak M, et al. Azole Resistance in *Aspergillus fumigatus* Isolates. *J Mazand Univ Med Sci* 2013; 23(103): 121-137 (Persian). 2013;23(103):121-37. Scopus
 33. Aslani N, Nabili M, Zahedi N, Vaezi A, khodavaisy S, Badali H. The Role of Pattern Recognition Receptors (PRR) in Human Candidiasis. *J Mazand Univ Med Sci* 2014; 24(114): 224-240 (Persian). Scopus
 34. Vaezi, A., Mardani, M., Fakhim, H., Hedayat Yaghoobi, M., Abtahian, Z., Nasri, E., et al. (2018). Severe disseminated phaeohyphomycosis in a patient with inherited CARD9 deficiency. *Arch. Clin. Infect. Dis.* doi: 10.1093/infdis/jiu412.ISI
 35. A. Ghorbani, A. Sadrzadeh, E. Habibi, K. Dadgar, J. Akbari, M. Moosazadeh, H. Bakhshi, F. Ahangarkani, A. Vaezi (Corresponding Author). Efficacy of *Camellia sinensis* extract against *Candida* species in patients with denture stomatitis. DOI: <https://doi.org/10.18502/cmm.4.3.174>.ISI.
 36. Afsane Vaezi, Hamid Badali, Hamed Fakhim, Elahe Nasri, Mojtaba Hedayat Yaghoobi. A Review of Esophagitis Due to *Candida* Species in Human Immunodeficiency Virus (HIV) Infected Patients. A Review of Esophagitis Due to *Candida* Species in Human Immunodeficiency Virus
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(HIV) Infected Patients. Doi. 10.15171/ijep.2018.23.

37. Nasri E, Mirhendi H, Ataei B, Vaezi A, Sadeghi S, et al. (2020) Recurrent COVID-19 Pneumonia in Chronic Lymphocytic Leukemia Patient. Arch ClinMicrobiol Vol. 11 No. 4:120. doi: 10.36648/1989-8436.11.4.120.
 38. Leila Masumi, Hamed Fakhim, Afsane Vaezi, Mohammad Pourhassan-Moghaddam, Abbas Ebrahimi-Kalan, Nosratollah Zarghami. Strategies for Isothermal Amplification of Nucleic Acids: are they Ready to be Applied in Point of Care Diagnosis of Mycosis? Volume 11, Issue 3, 2021, 10559 – 10571. IF: 0.7
 39. Hamed Fakhim, Elahe Nasri, Shima Aboutalebian, Sahar Golipour, Mahnaz Nikaeen, Afsane Vaezi, Somayeh Mousavi, Sama Faramarzi, Armin Farhang, Shaghayegh Haghjooy Javanmard, Mehrdad Salahi, Ali Derakhshandeh, Kazem Ahmadikia8 & Hossein Mirhendi Asymptomatic carriers of coronavirus disease 2019 among healthcare workers in Isfahan, Iran. <https://www.futuremedicine.com/doi/10.2217/fvl-2020-0224>.
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Presentations

1. A. Vaezi, H. Badali, H. Fakhim. The pesticide behavior and azole resistance development in rice paddy fields. July 8-13, 2017. Valencia, Spain.
2. A. Vaezi, H. Badali, J.F. Meis, H. Fakhim, F. Hagen, E. Dannaoui. Molecular epidemiology and antifungal susceptibility profiles of *Aspergillus terreus* in Iran. 30 June - 4 July 2018. Amsterdam, The Netherland. ORAL.
3. Afsane Vaezi, Hamed Fakhim, Sadegh Khodavaisy, Mohsen Geramishoar, Ahad Alizadeh, Jacques F. Meis, Hamid Badali. Frequency and Geographic Distribution of CARD9 Mutations in Patients with Severe Fungal Infections. The 5th Iranian Congress in Medical Mycology, Tehran, December 2018. ORAL.
4. Vaezi A, Badali H, Fakhim H. Azole resistance in *Aspergillus fumigatus* in fields supplemented with pesticide. *Aspergillus and Aspergillosis Congress*. November 8-10, 2016. Sari, Iran.
5. Vaezi A, Badali H. Azole Resistance in *Aspergillus fumigatus* Isolates. 3rd Iranian congress on medical mycology. 2015 Tehran, Iran
6. Vaezi A, Badali H. Evaluation of 98 Cases of Mucormycosis in Iran; A Systematic Review. The 2nd International and 4th Iranian Congress in Medical Mycology:
From Bench to Bed. 18th – 20th November 2015 Shiraz, Iran.
7. Vaezi A, Razzaghi R, Nazeri M, Ehsani M, Erami M, Badali H. Candidemia: Report of Six Cases in Kashan. The 2nd International and 4th Iranian Congress in Medical Mycology: From Bench to Bed. 18th – 20th November 2015 Shiraz, Iran.
8. Vaezi A, Badali H, Mousavi B, Mayahi S, Ansari S, Ahmadi B. Azole resistance in *Aspergillus fumigatus* obtained from hospitals environments. 3rd Iranian congress on medical mycology. 12th- 14th February 2014 Ahvaz, Iran.
9. Vaezi A, Badali H, Fakhim H. Isolation of G54E, R, W and V mutations of itraconazole and voriconazole-resistant *Aspergillus fumigatus* obtained from paddy fields. 1th national congress of paramedical students. 2015 Sari, Iran. ORAL
10. H. Badali, A. Vaezi, F. Faeli, F. Ahangarkani, M. Fakhar, S.H. Khojasteh. Simple, low-cost micro-culture method for rapid diagnosis of mucormycosis in murine model. 30 June - 4 July 2018. Amsterdam, The Netherland.
11. H. Fakhim, A. Vaezi , E. Dannaoui, C. Sharma, B. Mousavi, E. Nasri , A. Chowdhary , J.F. Meis, H. Badali. In vitro combination of voriconazole with micafungin against azole-resistant clinical isolates of *Aspergillus*

fumigatus from different geographical regions. 30 June - 4 July 2018. Amsterdam, The Netherland.

12. H. Fakhim, A Vaezi, E Dannaoui, A Chowdhary, D Nasiry, L Faeli, J.F Meis, H Badali. Comparative virulence of *Candida auris* with *Candida haemulonii*, *Candida glabrata* and *Candida albicans* in a murine model. 30 June - 4 July 2018. Amsterdam, The Netherland.

13. B. Mousavi, H Badali, A Vaezi, S Khodavaisy, F Hagen, M Laal Kargar, Z Salehi, J.F Meis. Composting as a resource for environmental azole resistance mutation in *Aspergillus fumigatus*. 30 June - 4 July 2018. Amsterdam, The Netherland.

14. Ghoorchian, A. Vaezi, H. Badali. Molecular Identification and Antifungal Susceptibility Profile of Clinical *Candida* Species Isolates. 30 June - 4 July 2018. Amsterdam, The Netherland.

15. H. Fakhim, E. Dannaoui, A. Vaezi, S. Emami, H. Badali. In vivo antifungal activities of novel azole compounds (ATTAF-1 and ATTAF-2) in a murine model of invasive candidiasis. July 8-13, 2017. Valencia, Spain.

16. Hamed Fakhim, Anuradha Chowdhary, Jacques F. Meis, Afsane Vaezi, Hamid Badali. Synergistic activity of micafungin plus voriconazole against multidrug-resistant

Candida auris. 22- 25 April 2017. Vienna, Austria.

17. K. Diba, K. Makhdoomi, NIMA Jazani, A. Chawshin , H. Fakhim, P. Badiee, H. Badali, A. Vaezi. Uncommon non-albicans *Candida* species isolated from renal transplant recipients: Species distribution and Susceptibility Profiles. 30 June - 4 July 2018. Amsterdam, The Netherland.

18. E. Nasri, H Fakhim, K Diba, A Namaki, A Arastehfar, W Fang, A Vaezi, H Badali. Identification of *Candida albicans* species complex in vulvovaginal candidiasis by using conventional methods, hwp1 gene polymorphisms and MALDI-TOF MS profiles. 30 June - 4 July 2018. Amsterdam, The Netherland.

19. In vivo antifungal activities of novel azole compounds (ATTAF-1 and ATTAF-2) in a murine model of invasive candidiasis. Hamed Fakhim, Eric Dannaoui, Afsane Vaezi, Saeed Emami, Hamid Badali. 22- 25 April 2017. Vienna, Austria.

20. G. R. Shokoohi, H. Mirhendi, H. Badali, S. Ansari, A. Rezaei-Matehkolaei, B. Ahmadi, A. Vaezi, M.M. Alshahni, K. Makimura. In Vitro Activity of Luliconazole, Lanocanazole, and Efinaconazole Compared with Five Antifungal Drugs Against

Melanized Fungi and Relatives. 30 June - 4 July 2018. Amsterdam, The Netherland.

21. B. Mousavi, H Badali, S Khodavaisy, J.F Meis, F Hagen, M Laal Kargar, Z Salehi, A Vaezi. Composting as a resource for environmental azole resistance mutation in *Aspergillus fumigatus* in Iran. 30 June - 4 July 2018. Amsterdam, The Netherland.

22. Badali H, Vaezi A, Fakhim H, Hagen F, Meis JF. Current status of antifungal susceptibility profiles and resistance rates of *Aspergillus terreus* species complex isolates in Iran. November 8-10, 2016. Sari, Iran.

23. Fakhim H, Chowdhary A, Meis JF, Vaezi A, Badali H. In Vitro Interaction of Micafungin and Voriconazole

against azole-Resistant *Aspergillus fumigatus*. November 8-10, 2016. Sari, Iran.

24. Bandalizadeh Zeinab, Tavakoli M, Vaezi A, Hedayati MT, Shokohi T, Badali H. *Aspergillus* species in indoor environment of a burn hospital in Sari, Iran. November 8-10, 2016. Sari, Iran.

25. Badali H, Karimi M, Rezaie S, Shokohi T, Nabili M, Vaezi A, Khodavaisy S. In vitro antifungal susceptibility testing of five antifungal drugs against clinical and environmental isolates of *Aspergillus* species. 2015. Tehran. 3rd Iranian congress on medical mycology.

26. Fakhim H, Badali H, Emami S, Vaezi A, Hashemi SM, Faelia L, Dannaouie E. In Vitro Activities of Novel Azole Compounds (ATTAF-1 and ATTAF-2) Against Fluconazole-Susceptible and -Resistant Isolates of *Candida* species. Kurdistan University of Medical Sciences, Sanandaj, IRAN. 27-29 Sep 2016.

27. Fakhim H, Pourzad N, Karimi M, Vaezi A, Amirizad K, Falahati Nejad M, Badali H. In vitro activities of itraconazole against clinical *Aspergillus niger* complex strains. National student congress on pharmaceutical science. 2013 Sari, Iran.

28. Afsane Vaezi, Hamid Badali. In vitro antifungal activity of *Aspergillus terreus* species complex. 21th Annual student research committee congress of Mazandaran University of medical science. 2018 Sari, Iran. ORAL