## **Curriculum Vitae (CV)**

#### **PERSONAL INFORMATION:**

Legal name: Alireza Izadi Yazdanabadi

Preferred name: Alireza Izadi

Gender: Male

Date of Birth: January 16, 1983

Nationality: Iranian

Marital Status: Married

Present Statues: Assistant professor

Address: Department of Medical Parasitology and Mycology, School of Medicine,

Kerman University of Medical Sciences, Kerman, Iran.

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PhD: Medical Mycology (2016-2021)

Tehran University of Medical Sciences, Tehran, Iran

#### **Dissertation title:**

"The molecular identification and antifungal susceptibility patterns of keratomycosis in patients referred to Farabi Hospital in 2019"

MSc: Medical Mycology (2011-2014)

Kerman University of Medical Sciences, Kerman, Iran

#### **Dissertation title:**

"Evaluation of IL-4 , IL-6 , IL-17 , TGF- $\beta$  and IFN- $\gamma$  cytokines in HIV-positive and drugs-abuser men suffering from fungal infections in Kerman"

**BSc:** Cellular and Molecular Microbiology (2001-2005)

University of Kerman, Kerman, Iran



# Receiving grants (national and university grants) and collaboration in research projects

- Investigating the effects of *Lactobacillus casei* alone and in combination with nystatin in inhibiting the growth and biofilm formation of clinical *Candida species*. (Executor). The Research Deputy of Kerman University of Medical Sciences, 2022 | Grant.
- Evaluation of the antifungal and cytotoxic effects of separate fractions from a standardized extract of *Myrtus communis* L. on *Aspergillus spp*. (Executor). The Research Deputy of Kerman University of Medical Sciences, 2022 | Grant.
- Evaluation and comparison the effect of extract and petroleum ether isolated fractions of Nigella sativa L. on nystatin-sensitive and resistant *Candida albicans*. (Second Executor). The Research Deputy of Kerman University of Medical Sciences, 2022 | Grant.
- Evaluation the approachs of anti-fungal therapy using nanomaterials against candida species with focusing on *C. auris* as a multidrug-resistant pathogen. (Executor). The Medical Mycology and Bacteriology Research center, Kerman University of Medical Sciences, 2021 | Grant.
- The role of nanoliposomes in the treatment of infections caused by dermatophytes. (Co-worker). The Medical Mycology and Bacteriology Research center, Kerman University of Medical Sciences, 2021 | Grant.
- Investigation and comparison the effect of total extract and different fractions of petroleum ether of *Myrtus communis* L. on *Candida albicans* sensitive and resistant to nystatin. (Co-worker). The Research Deputy of Kerman University of Medical Sciences, 2021 | Grant.
- Evaluation of Antifungal, cytotoxic and apoptotic effects of Magnesium Oxide Nanoparticles on different *Candida species* in vitro condition. (Second Executor). The Research Deputy of Kerman University of Medical Sciences, 2020 | Grant.

## Experiences of supervising, advising, and referring student theses

#### - Supervising Master's theses:

• Investigating the effects of *Lactobacillus casei* alone and in combination with nystatin in inhibiting the growth and biofilm formation of clinical *Candida species*. 2023 | Continuing.

- Evaluation of the antifungal and cytotoxic effects of separate fractions from a standardized extract of *Myrtus communis* L. on *Aspergillus spp.* 2023 | Continuing.
- Evaluation of Antifungal, cytotoxic and apoptotic effects of Magnesium Oxide Nanoparticles on different *Candida species* in vitro condition. (Second Executor). The Research Deputy of Kerman University of Medical Sciences, 2022 | Finished. Manuscript was submitted.

#### - Advising Master's theses:

- Evaluation and comparison the effect of extract and petroleum ether isolated fractions of Nigella sativa L. on nystatin-sensitive and resistant *Candida albicans*. 2022 | Continuing.
- Investigation and comparison the effect of total extract and different fractions of *Myrtus communis* L. on *Candida albicans* sensitive and resistant to nystatin. 2021 | Finished. One paper published.

#### - Refereeing Master's theses:

- Investigating the antimicrobial and anti-biofilm effect of the antibiotic imipenem with/without bismuth oxide nanoparticles on clinical isolates of carbapenems resistant *Pseudomonas aeruginosa*. **Master's Degree, 2022**
- Evaluation of efflux pumps in decrease of susceptibility to biocides and development of resistance to antibiotics in enterococcal isolates from clinical specimens and assessment the role of ZnO nanoparticles in inhibition of these pumps. **Ph.D Degree**, 2022

## **Scientific publications**

#### **Research articles**

- Mousavi, Seyed Amin Ayatollahi, Abnoos Mokhtari, Mahmood Barani, Alireza Izadi\*, Alireza Amirbeigi, Narges Ajalli, Azam Amanizadeh, and Sanaz Hadizadeh.
   "Advances of liposomal mediated nanocarriers for the treatment of dermatophyte infections." Heliyon (2023).
- Ahmad Masoumi, Mohammad Soleimani, Momeneh Azizkhani, **Alireza Izadi**, Kasra Cheraqpour, Seyed Ali Tabatabaei, Sadegh Khodaveisi, Mehdi Aminzadeh. "Clinical Features, Risk Factors, and Management of Candida Keratitis". **Ocular Immunology and Inflammation (2023)** 6; 1:6.
- Soleimani, Mohammad, **Alireza Izadi**, Sadegh Khodavaisy, Claudy Oliveira dos Santos, Marlou C. Tehupeiory-Kooreman, Roshanak Daie Ghazvini, Seyed Jamal Hashemi et al." Fungal keratitis in Iran: Risk factors, clinical features, and mycological profile". **Frontiers in Cellular and Infection Microbiology** ( **2023**) 30;13:59.

- Tina Nazari, Fatemeh Sadeghi, **Alireza Izadi**, Setayesh Sameni, Shahram Mahmoudi. "COVID-19-associated fungal infections in Iran: A systematic review". **PloS one** (2022). 17 (7). e0271333
- Alireza Izadi, Sanaz Aghaei Gharehbolagh, Fatemeh Sadeghi, Meysam Talebi, Kimia Darmiani, Ali Zarrinnia, Fateme Zarei, Fatemeh Peymaeei, Shaghayegh Khojasteh, Andrew M Borman, Shahram Mahmoudi. "Drug repurposing against Candida auris: a systematic review". Mycoses (2022),65(8), 784-793
- Mohammadreza Salehi, Shahram Mahmoudi, Omid Rezahosseini, Sayed Jamal Hashemi, Kazem Ahmadikia, Farzad Aala, Nasim Khajavirad, Neda Alijani, Alireza Izadi,..."The Epidemiological, Clinical, Mycological, and Pathological Features of Rhino-cerebral Mucormycosis: A Systematic Review", Iranian Journal of Pathology (2022) 112-121
- Iman Torabi, Fariba Sharififar, **Alireza Izadi**, Seyye Amin Ayatollahi Mousavi, "Inhibitory effects of different fractions separated from standardized extract of Myrtus communis L. against nystatin-susceptible and nystatin-resistant Candida albicans", **Heliyon (2022)** 8 (3), e09073
- Alireza Izadi, Mohammad Soleimani, Claudy Oliveira Dos Santos, Marlou C. Tehupeiory-Kooreman, Roshanak Daie Ghazvini, Seyed Jamal Hashemi, Mohssen Gramishoar et al. "Fungal keratitis caused by Pseudallescheria boydii: clinical and mycological characteristics." Journal of Ophthalmic Inflammation and Infection 11, no. 1 (2021): 1-5.
- Hasti Kamali Sarvestani, Roshanak Daie Ghazvini, Seyed Jamal Hashemi, Sassan Rezaie, Shahram Mahmoudi, Mohsen Gerami Shoar, Miad Elahi, **Alireza Izadi** et al. "First molecular report of causative agent of otomycosis due to Aspergillus luchuensis." **Journal of wound care** 30, no. Sup9a (2021): XIVi-XIViii.
- Sanaz Aghaei Gharehbolagh, **Alireza Izadi**, Meysam Talebi, Fatemeh Sadeghi, Ali Zarrinnia, Fateme Zarei, Kimia Darmiani, Andrew M. Borman, and Shahram Mahmoudi. "New weapons to fight a new enemy: A systematic review of drug combinations against the drug-resistant fungus Candida auris." **Mycoses. 2021**
- Alireza Izadi, Mohammad Soleimani, Roshanak Daie Ghazvini, Seyed Jamal Hashemi, Mohssen Gramishoar, Kazem Ahmadikia, Mehdi Aminizadeh et al. "Clinical and mycological characteristics of keratitis caused by Colletotrichum gloeosporioides: A case report and review of literature." The Journal of Infection in Developing Countries 15, no. 02 (2021): 301-305.
- Tooba Ghazanfari, Mohammad Reza Salehi, Saeed Namaki, Jalil Arabkheradmand, Abdolrahman Rostamian, Maryam Rajabnia Chenary, Sara Ghaffarpour, **Alireza Izadi** et al. "Interpretation of Hematological, Biochemical, and Immunological Findings of COVID-19 Disease: Biomarkers Associated with Severity and Mortality." **Iranian Journal of Allergy, Asthma and Immunology** 20, no. 1 (**2021**): 46-66.
- Shahram Mahmoudi, Mahmoud Vahidi, Ebadollah S. Malekabad, Alireza Izadi, Mehrdad Khatami, and Alireza Dadashi. "In vitro antifungal activity of green synthesized silver nanoparticles in comparison to conventional antifungal drugs

- against Trichophyton interdigitale, Trichophyton rubrum and Epidermophyton floccosum." **Infectious Disorders-Drug Targets** (Formerly Current Drug Targets-Infectious Disorders) 21, no. 3 (**2021**): 370-374.
- Mohammadreza Salehi, Sadegh Khodavaisy, Nasim Khajavirad, Alireza Izadi, Seyed Ali Dehghan Manshadi, Alireza Abdollahi, Amir Aliramezani et al. "Proven pulmonary aspergillosis in a COVID-19 patient: A case report." Current Medical Mycology 7, no. 2 (2021): 39-42.
- Mohammadreza Salehi, Kazem Ahmadikia, Shahram Mahmoudi, Saeed Kalantari, Saeidreza Jamalimoghadamsiahkali, Alireza Izadi, Mohammad Kord, Seyed Ali Dehghan Manshadi, Arash Seifi, Fereshteh Ghiasvand, Nasim Khajavirad, Saeedeh Ebrahimi, Amirhossein Koohfar, Teun Boekhout, Sadegh Khodavaisy, Oropharyngeal candidiasis in hospitalised COVID-19 patients from Iran: Species identification and antifungal susceptibility pattern, Mycoses 2020, 63 (8), 771-778.
- Sanaz Aghaei Gharehbolagh, Bahareh Fallah, **Alireza Izadi**, Zeinab Sadeghi Ardestani, Pooneh Malekifar, Andrew M. Borman, Shahram Mahmoudi, Distribution, antifungal susceptibility pattern and intra-Candida albicans species complex prevalence of Candida africana: A systematic review and meta-analysis, **PloS one 2020**, 15 (8), e0237046.
- Ali Ahmadi, Shahram Mahmoudi, Sassan Rezaie, Sayed Jamal Hashemi, Eric Dannaoui, Hamid Badali, Mansoureh Ghaffari, Farzad Aala, Alireza Izadi, Aida Maleki, Jacques F Meis, Sadegh Khodavaisy, In vitro synergy of echinocandins with triazoles against fluconazole-resistant Candida parapsilosis complex isolates, Journal of global antimicrobial resistance 2020, 21, 331-334.
- Zahra Salehi, Negar Fatahi, Alireza Izadi, Mojtaba Taran, Hamid Badali, Seyed Jamal Hashemi, Sassan Rezaie, Roshanak Daie, Aleksandra Barac, Mansoureh Ghaffari, Farzad Aala, Sadegh Khodavaisy, Comparison of in vitro antifungal activity of novel triazoles with old antifungal agents against dermatophyte species caused tinea pedis, Journal de Mycologie Médicale 2020, 100935.
- Mohammad Soleimani, Ahmad Masoumi, Sadegh Khodavaisy, Mostafa Heidari, Ali A Haydar, Alireza Izadi\*, Current diagnostic tools and management modalities of Nocardia keratitis, Journal of ophthalmic inflammation and infection 2020, 10 (1), 1-6.
- Gholamreza Asadikaram, Maryam Ram, Alireza Izadi, Mahmood Sheikh Fathollahi, Mohammad Hadi Nematollahi, Hamid Najafipour, Bidollah Shahoozehi, Mahboobeh Mirhoseini, Mohammad Masoumi, Nader Shahrokhi, Mohammad Kazemi Arababadi, The study of the serum level of IL-4, TGF-β, IFN-γ, and IL-6 in overweight patients with and without diabetes mellitus and hypertension, Journal of Cellular Biochemistry 2019, 120 (3), 4147-4157.
- Mehrdad Khatami, Mina Sarani, Faride Mosazadeh, Mohammadreza Rajabalipour,
   Alireza Izadi, Meghdad Abdollahpour-Alitappeh, Marcos Augusto Lima Nobre,
   Fariba Borhani, Nickel-Doped Cerium Oxide Nanoparticles: Green Synthesis Using

- Stevia and Protective Effect against Harmful Ultraviolet Rays, **Molecules 2019**, 24 (24), 4424.
- Nazanin Sadat Seddighi, Samira Salari, **Alireza Izadi**, Evaluation of antifungal effect of iron-oxide nanoparticles against different Candida species, **Iet Nanobiotechnology 2017**, 11 (7), 883-888.
- Samira Salari, Seyyed Amin Ayatollahi Mousavi, Sanaz Hadizadeh, **Alireza Izadi**, Epidemiology of dermatomycoses in Kerman province, southeast of Iran: a 10-years retrospective study (2004–2014), **Microbial pathogenesis 2017**, 110, 561-567.
- Seyyed Amin Ayatollahi Mousavi, Gholamreza Asadikaram, Nouzar Nakhaee, **Alireza Izadi**\*, Plasma levels of IFN-γ, IL-4, IL-6 and IL-17 in HIV-positive patients with oral candidiasis, **Jundishapur journal of microbiology 2016**, 9 (2).
- Seyyed Amin Ayatollahi-Mousavi, Gholamreza Asadikaram, Nouzar Nakhaee, **Alireza Izadi**, Nasser Keikha, The effects of opium addiction on the immune system function in patients with fungal infection, **Addiction & health 2016**, 8 (4), 218.
- Nasser Keikha, SA Ayatollahi Mousavi, GH Shahidi Bonjar, Bahman Fouladi, Ali Reza Izadi, In vitro antifungal activities of Actinomyces species isolated from soil samples against Trichophyton mentagrophytes, Current medical mycology 2015, 1 (3), 33.
- Alireza Izadi, G Asadikaram, Nozar Nakhaee, Sanaz Hadizadeh, A Ayatollahi Mousavi, Plasma levels of Transforming Growth Factor Beta in HIV-1 patients with oral candidiasis, Current Medical Mycology 2015, 1 (1), 22.

## **Congress Presentations:**

- Alireza Izadi, Mohammad Soleimani, Claudy Oliveira dos Santos, Marlou C.
  Tehupeiory-Kooreman, Roshanak Daie Ghazvini, Seyed Jamal Hashemi, Mohssen
  Gramishoar, Mehdi Aminizadeh, Zohre Abedinifar, Paul E. Verweij, Sadegh
  Khodavaisy, Fungal Keratitis Caused by Pseudallescheria boydii: Clinical and
  Mycological Characteristics, 13<sup>th</sup> International Congress of Medical Lab and Clinic 57 February 2022. Tehran, Iran.
- Alireza Izadi, Sadegh Khodavaisy, Mohammad Soleimani, Seyed Jamal Hashemi, Sassan Rezaie, Roshanak Daei, Seyyed Amin Ayatollahi Mousavi, Zohreh Abedinifar, Mehdi Aminzadeh, Epidemiological profile and antifungal susceptibility of fungal agents causing human fungal keratitis in Iran, 12<sup>th</sup> International Congress of Medical Lab and Clinic 12-14 December 2019. Tehran, Iran.
- Alireza Izadi , Seyyed Amin Ayatollahi Mousavi, Gholamreza Asadikaram, Nouzar Nakhaee, The Effects of Opium Addiction on the Immune System Function in Patients with Fungal Infection, 14<sup>th</sup> International Congress of Immunology & Allergy 26-28 April 2018 Tehran, Iran.
- **Alireza Izadi**, Seyyed Amin Ayatollahi Mousavi, Gholamreza Asadikaram, Nouzar Nakhaee, Evaluation of serum levels of IFN-γ, TGF-β, IL-4, IL-6 and IL-17 in HIV

- opioid-addicts suffering from fungal infections in Kerman, 5<sup>th</sup> Iranian Congress in Medical Mycology 4-6 December 2018, Tehran, Iran.
- Ayatollahi Mousavi SA, Asadikaram GR, Nakhei N, **Izadi A**\*, Gamma Interferon in HIV+ patients suffering from fungal infection, 3<sup>th</sup> Iranian Congress of Medical Mycology 15-16 May 2014, Tehran, Iran.
- **Alireza Izadi**, Seyyed Amin Ayatollahi Mousavi. The most common fungal infections in opium addicted persons in Kerman. 2<sup>nd</sup> International and 4<sup>th</sup> Iranian Congress in Medical Mycology:From Bench to Bed 18 20 November 2015, Shiraz, Iran.
- **Alireza Izadi**, Seyyed Amin Ayatollahi Mousavi, Gholamreza Asadikaram, Nouzar Nakhaee, Sanaz Hadizadeh. Cytokine levels in plasma samples of HIV-positive patients with Oral Candidiasis. 2<sup>nd</sup> International and 4<sup>th</sup> Iranian Congress in Medical Mycology:From Bench to Bed 18 20 November 2015, Shiraz, Iran.

## **Professional Experiences**

#### **Job Experience**

- **Research Officer/Assistant Professor** (Kerman University of Medical Sciences, Kerman, Iran; 2021- present).
- **Instructor of Microbiology** (Bam University of Medical Sciences, Bam, Iran; 2016-2018)
- **Supervisor of Medical Mycology Laboratory** (Kerman University of Medical Sciences, Kerman, Iran; 2014-2016).
- **Supervisor of Water Quality Control Laboratory** (Kerman Province Water And Waste Water Corporation, Kerman, Iran; 2008-2011).

#### **Technical Skills**

- Performing fungal tests to detect and identifying fungi in order to diagnose infections
- Collecting samples depending upon suspected locations of fungal infection, such as scrapings of the skin, nail and hair samples, body fluids, blood, and tissue biopsy.
- Antifungal susceptibility tests (AFST)
- Microbial Culture
- Reverse transcription polymerase chain reaction (RT-PCR)
- Real-time PCR
- PCR Primer designing
- High Performance Liquid Chromatography (HPLC)
- Enzyme-linked immunosorbent assay (ELISA)
- Immunofluorescence (IF)
- Electrophoresis
- MTT assay
- Handling, blood sampling and injection of laboratory animals

#### **Research Interests**

- Fungal infections
- Antifungal susceptibility testing and investigate mechanism of actions
- Molecular epidemiology of fungal Infection
- New molecular diagnostic methods in mycology
- Immunology of fungal infection
- Mycotoxins and fungal metabolites
- Applications of nanoparticles against fungi

### **Memberships**

- Iranian Medical Mycology Society
- Medical Mycology and Bacteriology Research Center, Kerman, Iran

#### **Honors & Achievements**

- **Rank 1** in the entrance exam in PhD program.
- Top 1% among medical mycology Master students at Kerman University of Medical Science

## **Computer Skills**

- Microsoft Office
- BLAST
- SPSS Statistics
- Chromas
- BioEdit
- Mega
- Prism

## **Language Skills**

- Persian (Native Language)
- English (Advanced)
- Germany (Elementary)

#### **Extra-Curricular Activities**

- Playing cithern instrument
- Sports: Mountain climbing, Swimming, Badminton

#### References

## • Iraj Sharifi, PhD, Distinguished Professor

- -Head of Medical Parasitology & Mycology Department & Director of Leishmaniasis Research Center, Kerman University of Medical Sciences, Kerman, Iran
- Member of the Regional Programme Review Group on Neglected Tropical Diseases of the World Health Organization, Regional Office for the Eastern Mediterranean (WHO/EMRO)

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• Seyyed Amin Ayatollahi Mousavi. PhD, Professor Department of Medical Parasitology and Mycology, Afzalipoor Faculty of Medical Sciences, Kerman University of Medical Sciences, Kerman, Iran. Email address: aminayatollahi@kmu.ac.ir

#### • Samira Salari, PhD, Associate Professor

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