



Ali Ghanbari Asad

Associate Professor of Medical Biotechnology

Department of Medical Biotechnology, School of Advanced Technologies

Fasa University of Medical Science

(+98)9128359020

+98 (71) 36290696

alighanbariasad@gmail.com

a.ghanbari@fums.ac.ir

➤ **Date of birth:** 1982 -8-26

➤ **Birthplace:** Tehran – Shahre Rey

➤ **Educations & Academic Careers**

- 1997–1999 **High School Diploma**, *Sajad High School*, Tehran, Iran, *GPA : 16.5/20*.
- 1999–2000 **Pre-University Diploma**, *Sajad Pre-University*, Tehran, Iran, *GPA :16.8/20*.
- 2001–2005 **B.Sc. in Laboratory sciences**, *kerman university of medical science*, Kerman, Iran, *GPA : 16.8/20*.
- 2006–2009 **M.Sc. in Medical Microbiology**, *Shiraz university of medical science*, shiraz, Iran, *GPA : 17.5/20*.
- 2009–2015 **Ph.D in Medical Biotechnology**, *Shahid Beheshti university of medical science*, Tehran, Iran, *GPA : 18.4/20*.
- 2016–2022 **Assistant Professor**, *Fasa university of medical science*, Fars, Iran.
- 2022- present Associate **Professor**, *Fasa university of medical science*, Fars, Iran.
- **H index:** 9

Links:

Scopus: <https://www.scopus.com/authid/detail.uri?authorId=57192097449>

Google scholar:

https://scholar.google.com/citations?view_op=list_works&hl=en&user=3RILKqkAAAAJ

➤ **Theses**

Graduate Thesis

- 2009 **M.Sc in Medical Microbiology: Antigenic variations of human influenza virus in Shiraz, Iran**, *Supervisor: Prof. Afagh Moattari*.
- 2015 **Ph.D in Medical Biotechnology: Suicide gene therapy for breast cancer with a suicide-inducing vector carrying the mammaglobin-1 promoter and Hypoxia response elements**, *Supervisor: Prof. Bahram Kazemi*.

➤ **Honors and Awards**

- 2009 **Ranked 9rd in Biotechnology Nationwide Ph.D Entrance Exam**,
- 2020 **Top University Technologist at University**

2022 top researcher at University

➤ Fields of Interest

- Production of engineering proteins
- Design molecular diagnostic kit
- Design diagnostic kit based on ELISA
- Micro RNA, LNC-RNA and circ-RNA
- Nano-Biosensor
- Drug delivery with liposome

➤ Publications

Journal Papers

Published & Accepted Papers:

1. Mansouri, Shahla, Afshin Amari, and Ali Ghanbari Asad. "Inhibitory effect of some medicinal plants from Iran on swarming motility of Proteus rods." *J Med Sci* 5.3 (2005): 216-221.
2. Moattari, A., H. Ashrafi, M. R. Kadivar, M. T. Kheiri, M. Shahidi, M. Arabpour, and A. Ghanbari. "Antigenic variations of human influenza virus in Shiraz, Iran." *Indian journal of medical microbiology* 28, no. 2 (2010): 114.
3. Moattari, Afagh, Ali Ghanbari Asad, Ardalan Mansouri, Mostafa Malehi Vaziri, and Farshid Moradpour Shammami. "Evaluation of measles, rubella, mumps, hepatitis B and varicella zoster antibodies in medical and dental students in Shiraz, Iran." *Novelty in Biomedicine* 2, no. 1 (2014): 6-9.
4. Zomorodian, Kamiar, Mohammad Javad Rahimi, Mohammad Taheri, Ali Ghanbari Asad, Soghra Khani, Iman Ahrari, Keyvan Pakshir, and Reza Khashei. "The cutaneous bacterial microflora of the bodybuilders using anabolic-androgenic steroids." *Jundishapur journal of microbiology* 8, no. 1 (2015).
5. Barati, Mahmood, Maryam Tabarzad, Hossein Safarpour, Ali Ghanbariasad, and Omar Ghaderi. "Validation of a simple and rapid method for assessment of intracellular bacterial asparaginase." (2016): 33-42.
6. Ghanbariasad, Ali, Mojgan Bandehpour, and Bahram Kazemi. "Hypoxia response elements can cause the overexpression of the BAX mRNA under hypoxic condition." *Iranian Journal of Cancer Prevention* 9, no. 5 (2016).
7. Ghanbariasad, Ali, Mojgan Bandehpour, Hajar Yaghoobi, and Bahram Kazemi. "Suicide gene therapy for breast cancer with a suicide-inducing vector carrying the mammaglobin-1 promoter." *Minerva Biotechnologica* 30, no. 2 (2018): 45-50.
8. Kohansal, Maryam, and Ali Ghanbari Asad. "Molecular analysis of Shiga toxin-producing Escherichia coli O157: H7 and non-O157 strains isolated from calves." *Onderstepoort Journal of Veterinary Research* 85, no. 1 (2018): 1-7.
9. Kheshtzar, Raziye, Aydin Berenjian, Seyedeh-Masoumeh Taghizadeh, Younes Ghasemi, Ali Ghanbari Asad, and Alireza Ebrahiminezhad. "Optimization of reaction parameters for the green synthesis of zero valent iron nanoparticles using pine tree needles." *Green Processing and Synthesis* 8, no. 1 (2019): 846-855.
10. Ghanbariasad, Ali, Seyedeh-Masoumeh Taghizadeh, Pau Loke Show, Saifuddin Nomanbhay, Aydin Berenjian, Younes Ghasemi, and Alireza Ebrahiminezhad. "Controlled synthesis of iron oxyhydroxide (FeOOH) nanoparticles using secretory

compounds from *Chlorella vulgaris* microalgae." *Bioengineered* 10, no. 1 (2019): 390-396.

11. Rabienia, Mahsa, Zahra Roudbari, Ali Ghanbariasad, Abbas Abdollahi, Elyas Mohammadi, Nahid Mortazavidehkordi, and Akbar Farjadfar. "Exploring membrane proteins of *Leishmania major* to design a new multi-epitope vaccine using immunoinformatics approach." *European Journal of Pharmaceutical Sciences* 152 (2020): 105423.
12. Kohansal, Maryam, Hailin Tang, Xiaoming Xie, Ali Taghinezhad, and Ali Ghanbariasad. "Circular RNAs as miRNA sponges in triple-negative breast cancer: A systematic review." *Minerva Biotechnologica* 32, no. 2 (2020): 79-87.
13. Ghanbariasad, Ali, and Mahmoud Osanloo. "Development of two stable green nanoformulations with potent anticancer properties." *Nanomedicine Research Journal* 5, no. 3 (2020): 234-244.
14. Zarenezhad, Elham, Mahmoud Agholi, Ali Ghanbariasad, Ali Ranjbar, and Mahmoud Osanloo. "A nanoemulsion-based nanogel of Citrus limon essential oil with leishmanicidal activity against *Leishmania tropica* and *Leishmania major*." *Journal of Parasitic Diseases* (2020): 1-8.
15. Moemenbellah-Fard, Mohammad Djaefar, Abbas Abdollahi, Ali Ghanbariasad, and Mahmoud Osanloo. "Antibacterial and leishmanicidal activities of *Syzygium aromaticum* essential oil versus its major ingredient, eugenol." *Flavour and Fragrance Journal* 35, no. 5 (2020): 534-540.
16. Askari, Hassan, Nima Sanadgol, Asaad Azarnezhad, Amir Tajbakhsh, Hossein Rafiei, Ali Reza Safarpour, Seyed Mohammad Gheibihayat, Ali Ghanbariasad et al. "Kidney diseases and COVID-19 infection: causes and effect, supportive therapeutics and nutritional perspectives." *Heliyon* (2021): e06008.
17. Ghanbariasad Ali, Alireza Valizadeh, Shamsi Noorpisheh Ghadimi, Zhila Fereidouni, and Mahmoud Osanloo. "Nanoformulating *Cinnamomum zeylanicum* essential oil with an extreme effect on *Leishmania tropica* and *Leishmania major*." *Journal of Drug Delivery Science and Technology* 63 (2021): 102436.
18. Ghanbariasad A, Amoozegar F, Rahmani M, Zarenezhad E, Osanloo M. Impregnated nanofibrous mat with nanogel of citrus sinensis essential oil as a new type of dressing in cutaneous leishmaniasis. *Biointerface Res. Appl. Chem.* 2021;11:11066-76.
19. Ghanbariasad Ali, Sare Azadi, Mahmoud Agholi, and Mahmoud Osanloo. "The nanoemulsion-based nanogel of *Artemisia dracunculoides* essential oil with proper activity against *Leishmania tropica* and *Leishmania major*." *Nanomedicine Research Journal* 6, no. 1 (2021): 89-95.
20. Abedinpour Niloufar, Ali Ghanbariasad, Ali Taghinezhad, and Mahmoud Osanloo. "Preparation of Nanoemulsions of *Mentha piperita* Essential Oil and Investigation of Their Cytotoxic Effect on Human Breast Cancer Lines." *BioNanoScience* 11, no. 2 (2021): 428-436.
21. Quinodoz, Mathieu, Virginie G. Peter, Nicola Bedoni, B  ryl Royer Bertrand, Katarina Cisarova, Arash Salmaninejad, Neda Sepahi, Ali Ghanbariasad et al. "AutoMap is a high performance homozygosity mapping tool using next-generation sequencing data." *Nature communications* 12, no. 1 (2021): 1-7.
22. Fooladi H, Ghanbariasad A, Sepahi N, Taghinezhad A, Tahmasebi S, Amiri A, Mirzaei H, Sahebznazar B. Multiple biomarker panel for the detection of circulating tumor cells in peripheral

- blood of breast cancer patients for early detection using the real-time reverse transcription-polymerase chain reaction. *Minerva Biotechnology and Biomolecular Research*. 2021;33(3):127
23. Piran M, Sepahi N, Moattari A, Rahimi A, Ghanbariasad A. Systems biomedicine of primary and metastatic colorectal cancer reveals potential therapeutic targets. *Frontiers in Oncology*. 2021;2314. Rehman AU, Sepahi N, Bedoni N, Ravesh Z, Salmaninejad A, Cancellieri F, Peter VG, Quinodoz M, Mojarrad M, Pasdar A, Asad AG. Whole exome sequencing in 17 consanguineous Iranian pedigrees expands the mutational spectrum of inherited retinal dystrophies. *Scientific Reports*. 2021 Sep 29;11(1):1-9
 24. Bastami M, Masotti A, Saadatian Z, Daraei A, Farjam M, Ghanbariasad A, Vahed SZ, Eyvazi S, Mansoori Y, Nariman-Saleh-Fam Z. Critical roles of microRNA-196 in normal physiology and non-malignant diseases: Diagnostic and therapeutic implications. *Experimental and Molecular Pathology*. 2021 Jun 21:104664.
 25. Zolghadri S, Ghanbariasad A, Fallahian F, Rahban M, Kalavani M, Bahman Jahromi E, Asadzadeh A, Hajiani M. Anticancer activity of N-heteroaryl acetic acid salts against breast cancer; in silico and in vitro investigation. *Molecular Biology Reports*. 2021 Oct 29:1-0.
 26. Eghbal B, Hekmat AS, Kouhpayeh SA, Ghanbariasad A, Javanmardi K, Samimi N, Fakhraei B, Farjam M. Evaluating the Effect of Electroconvulsive Shock and Duloxetine Combination Therapy on Behavioral, Cardiovascular, and Brain Oxidative Stress Markers in the Rats. *Galen Medical Journal*. 2021 Dec 31;10:e2218-
 27. Osanloo M, Ghanbariasad A, Taghinezhad A. Antioxidant and Anticancer Activities of Anethum graveolens L., Citrus limon (L.) Osbeck and Zingiber officinale Roscoe Essential Oils. *Traditional and Integrative Medicine*. 2021 Dec 27:333-47.
 28. Zolghadri S, Mosalanezhad F, Naderpoor M, Bordbar R, Asadzadeh A, Ghanbariasad A, Ghavamizadeh M. The evaluation of the anti-Histone deacetylase, antibacterial, antioxidant and cytotoxic activities of synthetic N, N'-ethylenebis (α methylsalicylideneimine) Schiff base derivatives. *Iranian Journal of Chemistry and Chemical Engineering (IJCCE)*. 2021 Aug 9.
 29. Zolghadri S, Ghanbariasad A, Fallahian F, Rahban M, Kalavani M, Bahman Jahromi E, Asadzadeh A, Hajiani M. Anticancer activity of N-heteroaryl acetic acid salts against breast cancer; in silico and in vitro investigation. *Molecular Biology Reports*. 2022 Jan;49(1):363-72.
 30. Osanloo M, Yousefpoor Y, Alipanah H, Ghanbariasad A, Jalilvand M, Amani A. In-vitro Assessment of Essential Oils as Anticancer Therapeutic Agents: A Systematic Literature Review. *Jordan Journal of Pharmaceutical Sciences*. 2022 Jun 1;15(2):173-203.
 31. Rad MN, Behrouz S, Zokaei K, Behrouz M, Ghanbariasad A, Zarenezhad E. Synthesis of some novel 8-(4-Alkylpiperazinyl) caffeine derivatives as potent anti-Leishmania agents. *Bioorganic Chemistry*. 2022 Nov 1;128:106062.
 32. Ghanbariasad A, Emami L, Zarenezhad E, Behrouz S, Zarenezhad A, Rad MN. Synthesis, biological evaluation and in silico studies of 1, 2, 3-triazolyl-metronidazole derivatives against *Leishmania major*. *New Journal of Chemistry*. 2022;46(18):8451-63.
 33. Moradi N, Taghizadeh SM, Ghanbariasad A, Berenjian A, Ebrahiminezhad A. Agar Microdilution Procedure: A Promising Technique for Antimicrobial Susceptibility Test of Colloidally Unstable Nanostructures. *Nanoscience & Nanotechnology-Asia*. 2022 Apr 1;12(2):34-40.
 34. Moulazadeh A, Farjadfar A, Ghanbariasad A. The Unspecific Primers of Nuclear Factor-kappa B (NF- κ B) Signaling Mediators. *Iranian Journal of Allergy, Asthma and Immunology*. 2022;21(2):228.
 35. Moradi N, Taghizadeh SM, Hadi N, Ghanbariasad A, Berenjian A, Khoo KS, Varjani S, Show PL, Ebrahiminezhad A. Synthesis of mesoporous antimicrobial herbal nanomaterial-carrier for silver nanoparticles and antimicrobial sensing. *Food and Chemical Toxicology*. 2022 Jul 1;165:113077.
 36. Deris S, Osanloo M, Ghasemian A, Ataei S, Kohansal M, Samsami S, Yazdanpanah A, Ebrahiminezhad A, Ghanbariasad A. The efficacy of AuNP-probe conjugate nanobiosensor in

non-amplification and amplification forms for the diagnosis of leishmaniasis. BMC Infectious Diseases. 2022 Dec;22(1):1-0.

➤ Total citation(Based on Scopus): 228

➤ Books:

- compilation

2010 **Mostafa salehi**, **Ali Ghanbariasad**, **hamidraza molaei**, Medical Virology Textbook, ISBN: 9786005162769 (In Persian).

- Translation

2017 Behroz Johari, Mohamad asgari, Saeid kargozar, **Ali ghanbariasad**, Mahmood barati, Bahare zarei... Molecular Biotechnology: Principles and Applications of Recombinant DNA. by Bernard R. Glick

➤ Presenting papers in congresses:

1. Quinodoz, Mathieu, Virginie G. Peter, Nicola Bedoni, Béryll Royer Bertrand, Katarina Cisarova, Arash Salmaninejad, Neda Sepahi, **Ali Ghanbariasad** et al. “High performance homozygosity mapping using sequencing data”. American Society of Human Genetics 69th Annual Meeting
2. Abedinpour, Niloufar, **Ali Ghanbariasad** .Effect of nanoformulating of Mentha piperita (peppermint) essential oil on its cytotoxicity against some human breast cancer cell lines. the 3rd Nanomedicine and Nanosafety Conference
3. Somaye Deris, Mahmood osanloo and **Ali ghanbariasad**. Gold nanoparticle-based probe for the colorimetric detection of Leishmania major. the 3rd Nanomedicine and Nanosafety Conference
4. **Ghanbariasad Ali**, Sare Azadi, Mahmoud Agholi, and Mahmoud Osanloo .Developing of a green nanoemulsion gel with proper activity against Leishmania tropica and Leishmania major.8 th International e-congress on Nanoscience & Nanotechnology

➤ Talks

1. 2017 10th Molecular Medicine Conference on Diagnosis and Treatment of Diseases, Tehran, Iran, Talk: Generating a consisted of bax gene in control of cimERIC promoteor.

➤ Inventions:

1. Automatic flame containing electronic eye, Declaration number: 139550140003013503 , registration number:93650 ,(accepted date:2016) Iran

2. Dual-purpose device for sterilizing the environment and surfaces using a combination of UV rays, titanium dioxide filter and HEPA filter, Declaration number: 139850140003004393, registration number: 102681, (accepted date: 2019) Iran
3. Leishmania major diagnosis kit using Nested-LAMP method, Declaration number: 139750140003001780, registration number: 100642, (accepted date: 2018) Iran
4. Composite rack for use on laboratory table and laboratory hood, Declaration number: 139750140003002854, registration number: 99612, (accepted date: 2018) Iran
5. Cold supply box for molecular tests, Declaration number: 139550140003012523, registration number: 93592, (accepted date: 2016) Iran
6. Sterile gas gloves, Declaration number: 139850140003002558, registration number: 102874, (accepted date: 2019) Iran
7. Infantum Leishmania parasite detection kit based on ring isotherm propagation method using specific primers, Declaration number: 139750140003000923, registration number: 100526, (accepted date: 2018) Iran
8. Insulated and portable nanoplastic corridor, Declaration number: 139950140003001211, registration number: 104983, (accepted date: 2021) Iran

➤ Computer Skills

- Bioinformatic Software: CLC, Gene runner, NCBI software tools, Snap Gene, DNAMAN, ...
- Documentation: Microsoft Office
- Operating System: Microsoft

Teaching Experiences

- 2016- present: Animal cell culture, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science
- 2016- present: Bioinformatic, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science
- 2016- present: Genetic Engineering, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science
- 2016- present: Principles of Intellectual Property, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science
- 2016- present: Principles of working with laboratory animals, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science

- 2016- present: Principles of standardization of biotechnology products, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science
- 2016- present: creativity and innovation, Department of Medical Biotechnology, School of Advanced Technologies, Fasa University of Medical Science

➤ **Test Scores for English Language**

MSRT Overall: 63/100, MHLE: Ministry Health Language Examination. 50 is needed for Comprehensive Exam of Ph.D

➤ **Interests**

- Swimming
- Table Tennis
- Football

➤ **Laboratory skills**

- Western blot
- Laboratory routine tasks
- Laboratory techniques of microbiology
- ELISA
- Cloning
- Cell culture
- MTT assay
- TUNLE assay
- Real Time PCR
- LAMP assay
- PCR
- PCR-RFLP
- ARMS-PCR
- Swing PCR
- DNA, RNA and Exosome extraction
- CRISPR protocols
- Luciferase assays
- Cell culture protocols
- Liposome production