

CURRICULUM VITAE

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CURRENT STATUS:

- Assistant Professor of Molecular Medicine, School of Advanced Technology in Medicine, Isfahan University of Medical Sciences
- Deputy of research, Seyed Alshohada hospital, Isfahan University of Medical Sciences
- Deputy of research, Cancer Prevention Research Center, Isfahan University of Medical Sciences

EDUCATIONAL BACKGROUND:

Ph.D of Molecular Medicine, Tehran University of Medical Sciences, School of advanced Medical Technologies, Department of Molecular Medicine.

With an average score of 18.79 and recognized as a TOP STUDENT.

M.Sc of Microbiology, Shahrekord University of Medical Sciences, School of Medicine, Department of Microbiology and Immunology

With an average score of 17.97 and recognized as a TOP STUDENT.

RESEARCH INTERESTS

Book

Tabatabaiefar M, Moridnia A, **Shariati L. Cancer of Endocrine System.** Cancer Genetic and Psychotherapy, Springer. September 2017.
DOI: 10.1007/978-3-319-64550-6_10

Publications

1. Rahimmanesh I*, **Shariati L***, Dana N, Esmaeili Y, Vaseghi G, Haghjooy Javanmard S. **Cancer Occurrence as the Upcoming Complications of COVID-19.** *Front Mol Biosci.* 2022;8:813175. Published 2022 Jan 28. doi:10.3389/fmolb.2021.813175
2. Yasaman Esmaeili, Mohammad Khavani, Ashkan Bigham, Alireza Sanati, Elham Bidram, **Laleh Shariati**, Ali Zarrabi, Nafise Arbab Jolfaie, Mohammad Rafienia, **Mesoporous silica@chitosan@gold nanoparticles as “on/off” optical biosensor and pH-sensitive theranostic platform against cancer**, International Journal of Biological Macromolecules, Volume 202,2022
3. Alireza Sanati, Yasaman Esmaeili, Elham Bidram, **Laleh Shariati**, Mohammad Rafienia, Sara Mahshid, Onur Parlak, **Recent advancement in electrode materials and fabrication, microfluidic designs, and self-powered systems for wearable non-invasive electrochemical glucose monitoring**, Applied Materials Today, Volume 26, 2022
4. **Laleh Shariati**, Yasaman Esmaeili, Shaghayegh Haghjooy Javanmard, Elham Bidram, Abbas Amini. **Organoid Technology: Current Standing and Future Perspectives.** *Stem Cells.* DOI: 10.1002/stem.3379. 2021
5. Elmira Mohammadi, Fatemeh Shafiee, Kiana Shahzamani, Mohammad Mehdi Ranjbar, Abbas Alibakhshi, Shahrzad Ahangarzadeh, Leila Beikmohammadi, **Laleh Shariati**, Soodeh Hooshmandi, Behrooz Ataei, Shaghayegh Haghjooy Javanmard. **Novel and emerging mutations of SARS-CoV-2: Biomedical implications.** International journal of molecular sciences <https://doi.org/10.1016/j.biopha.2021.111599>.2021
6. Elham Bidram, Yasaman Esmaeili, Abbas Amini, Rossella Sartorius, Franklin R. Tay, **Laleh Shariati**,* and Pooyan Makvandi* **Nanobased Platforms for Diagnosis and Treatment of COVID-19: From Benchtop to Bedside.** ACS biomaterial Sciences and engineering. <https://doi.org/10.1021/acsbiomaterials.1c00318>.2021
7. Shirin Kouhpayeh[†], **Laleh Shariati**[†], Maryam Boshtam, Ilnaz Rahimmanesh, Mina Mirian, Yasaman Esmaeili, Malihe Najafu, Negar Khanahmad, Mehrdad Zeinalian, Maria Trovato, Franklin R Tay,

Hossein Khanahmad and Pooyan Makvandi. **The Molecular Basis of COVID-19 Pathogenesis, Conventional and Nanomedicine Therapy.** International Journal of Molecular Sciences. . 2021, 22, 5438. <https://doi.org/10.3390/ijms22115438>

8. Alireza Sanati, Roozbeh Siavash Moakhar, Imman I. Hosseini, Keyvan Raeissi, Fathallah Karimzadeh, Mahsa Jalali, Mahshid Kharaziha, Sara Sheibani, **Laleh Shariati**, John F. Presley, Hojatollah Vali and Sara Mahshid. **Gold Nano/Micro-Islands Overcome the Molecularly Imprinted Polymer Limitations to Achieve Ultrasensitive Protein Detection.** *Acs sensors*. <https://dx.doi.org/10.1021/acssensors.0c01701>
9. Mina Mirian, Shirin Kouhpayeh, **Laleh Shariati**, Maryam Boshtam, Ilnaz Rahimmanesh, Leila Darzi, Razieh Taghizadeh, Ali Jahanian-Najafabadi, Hossein Khanahmad. **Generation of HBsAg DNA aptamer using modified cell-based SELEX strategy.** *Molecular Biology Report*. <https://doi.org/10.1007/s11033-020-05995-2>
10. Nazanin Vaziri, **Laleh Shariati**, Shaghayegh Haghjooy Javanmard. **Leukemia inhibitory factor: A main controller of breast cancer.** [10.1007/s12038-020-00115-5](https://doi.org/10.1007/s12038-020-00115-5).
11. Negar Khanahmad, Hossein Khanahmad, **Laleh Shariati**, Ilnaz Rahimmanesh, and Shirin Kouhpayeh. **The possible role of glucose-6-phosphate dehydrogenase deficiency in COVID-19 global prevalence and distribution.** October 2020. *Journal of Research in Medical Sciences* 25(1):92
12. Sina Arabi, Golnaz Vaseghi, Zahra Heydari, Laleh Shariati, Bahareh Amin, **Harunor Rashid**, Shaghayegh Haghjooy Javanmard. **Clinical characteristics of COVID-19 infection in pregnant women: a systematic review and meta-analysis.** Preprint
13. **Shirin Kouhpayeh, Laleh Shariati (equally first)**, Maryam Boshtam, ... Hossein Khanahmad. **The Molecular Story of COVID-19; NAD+ Depletion Addresses All Questions in this Infection.** Preprint
14. Fatemeh Hajibabaie, Shirin Kouhpayeh, Mina Mirian, Ilnaz Rahimmanesh, Maryam Boshtam, Ladan Sadeghian, Azam Gheibi, Hossein Khanahmad, **Laleh Shariati**. **MicroRNAs as the Actors in the Atherosclerosis Scenario.** *J Physiol Biochem*. 2020 Feb;76(1):1-12. doi: 10.1007/s13105-019-00710-7
15. Nafiseh Hosseini, Hossein Khanahmad, Bahram Nasr-esfahani, Mojgan Bandeh Pour, Laleh Shariati, Nushin Zahedi,

and Bahram Kazemi. **Targeting of cholera toxin A (ctxA) gene by zinc** finger nuclease: pitfalls of using gene editing tools in prokaryotes. *Research in pharmaceutical sciences* 15(2):182. DOI: [10.4103/1735-5362.283818](https://doi.org/10.4103/1735-5362.283818)

16. **Laleh Shariati**¹, Alireza Amouheidari ², Hajar Naji Esfahani¹, Alireza Abed³, Shaghayegh Haghjooy javanmard ¹, Ismail Laher, Golnaz vaseghi*^{4,1}. **Protective effects of doxepin on radiation dermatitis in breast cancer: a double-blind randomized clinical trial.** *Br J Clin Pharmacol.* 2020 Feb 10. doi: 10.1111/bcp.14238
17. Zahra Mohammadi, Mohammad Amin Tabatabaiefar, Hossein Khanahmad, **Laleh Shariati.** **Evidence for the Presence of a Cryptic Promoter Within GFP: Is This Reporter Gene Still Ideal?** *Res Pharm Sci.* 2019 Aug;14(4):351-358.
18. Shirin Kouhpayeh, Zahra Hejazi, Maryam Boshtam, Mina Mirian, Ilnaz Rahimmanesh, Abbas Rezaei, **Laleh Shariati,** Hossein Khanahmad. **Alpha-4 integrin aptamer as a potential therapeutic tool for MS.** *J Cell Biochem.* 2019 May 20. doi: 10.1002/jcb.28907
19. **Shariati L,** Modaressi MH, Tabatabaiefar MA, Hejazi Z, Salehi M, Khanahmad H. **Targeted mutation in *KLF1* gene by zinc finger nuclease technology for the purpose of fetal hemoglobin (HbF) induction in K562 cell line.** *J Cell Biochem.* accepted
20. **Laleh Shariati,** Fattah Rohani, Nahid Heidari Hafshejani, Shirin Kouhpayeh, Maryam Boshtam, Mina Mirian, Ilnaz Rahimmanesh, Zahra Hejazi, | Mehran Modarres, Ina Laura Pieper, Hossein Khanahmad. **Disruption of SOX6 gene using CRISPR/Cas9 technology for gamma-globin reactivation: An approach towards gene therapy of β -thalassemia.** *J Cell Biochem.* DOI: 10.1002/jcb.27253
21. Fatahi A, Rahimmanesh I, Mirian M, Rohani F, Boshtam M, Gheibi A, **Shariati L,** Khanahmad H, Kouhpayeh S. **Construction and characterization of human embryonic kidney-(HEK)-293T cell overexpressing truncated $\alpha 4$ integrin.** *Res Pharm Sci.* 2018 Aug;13(4):353-359. doi: 10.4103/1735-5362.235162.
22. Modares Sadeghi M, **Shariati L,** Hejazi Z, Shahbazi M, Tabatabaiefar MA, Khanahmad H. **Inducing indel mutation in the SOX6 gene by zinc finger nuclease for gamma reactivation: An approach towards gene therapy of beta**

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23. Darzi L, Boshtam M, **Shariati L**, Kouhpayeh S, Gheibi A, Mirian M, Rahimmanesh I, Khanahmad H, Tabatabaiefar MA. **The silencing effect of miR-30a on *ITGA4* gene expression *in vitro*: an approach for gene therapy.** Res Pharm Sci. 2017 Dec;12(6):456-464. doi: 10.4103/1735-5362.217426.
24. Tabatabaiefar MA, Alipour P, Pourahmadiyan A, Fattahi N, **Shariati L**, Golchin N, Mohammadi-Asl J. **A novel pathogenic variant in an Iranian Ataxia telangiectasia family revealed by next-generation sequencing followed by *in silico* analysis.** J Neurol Sci. 2017 Aug 15;379:212-216. doi: 10.1016/j.jns.2017.06.012. Epub 2017 Jun 12.
25. **Shariati L**, Khanahmad H, Hejazi Z, Tabatabaiefar MA, Salehi M, Modaressi MH. **Genetic Modification of the *KLF1* gene to Overexpress Gamma -Globin Gene Using CRISPR/Cas9 System: An Approach in Gene Therapy for Beta Thalassemia.** J Gene Med. 2016 Sep 26. doi: 10.1002/jgm.2928
26. Sabzehei F, Kouhpayeh S,**Shariati L**. **A Novel Prokaryotic Green Fluorescent Protein Expression System for Testing Gene Editing Tools Activity Like Zinc Finger Nuclease.** Adv Biomed Res. 2017 Nov 30;6:155. doi: 10.4103/2277-9175.219420
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30. Nasrin Heydari, **Laleh Shariati**, Hossein Khanahmad, Zahra Hejazi, Mansoureh Shahbazi. **Gamma reactivation in the K562 cell line using the spongy effect of *KLF1*-binding site**

sequence: An Approach in Gene therapy for beta thalassemia. Iran J Basic Med Sci, 19(10):1063-069 · January 2016. DOI: 10.22038/ijbms.2016.7731

31. **Shariati L**, Khanahmad H, Hejazi Z, Tabatabaiefar MA, Salehi M, Modaressi MH. **Comparison of some methods to erythroid differentiation of K562 cell line.** Biotechnol Lett. 2016 Apr 13. [Epub ahead of print]
 32. Einizadeh, AR, Kouhpayeh, S, Hejazi Z, Boshtam M, **Shariati L**, Mirian M, Darzi L, Sojoudi , Khanahmad H, Rezaei A, **Antiproliferative effect of a synthetic aptamer mimicking androgen response element in the LNCaP cell line.** Cancer Gene Ther. 2016 Aug;23(8):254-7. doi: 10.1038/cgt.2016.26
 33. Fatemeh Pourzadegan, **Laleh Shariati**, Razieh Taghizadeh Hossein Khanahmad, Zahra Mohammadi, Mohammad Amin Tabatabaiefar. **Using Intron Splicing Trick for Preferential Gene Expression in Transduced Cells: An Approach for Suicide Gene Therapy.** Cancer Gene Ther. 2016 Jan;23(1):7-12. doi: 10.1038/cgt.2015.57. Epub 2015 Dec 18.
 34. Zahra Mohammadi, · **Laleh Shariat**, · Hossein Khanahmad, · Mahsa Kolahdouz , Fariborz Kianpoor, · Jahan Afroz Ghanbari, · Zahra Hejazi, · Mansoor Salehi, Parvaneh Nikpour, · Mohammad Amin Tabatabaiefar. **A Lentiviral Vector Expressing Desired Gene Only in Transduced Cells: An Approach for Suicide Gene Therapy.** · Mol Biotechnol. 2015 Sep;57(9):793-800. doi: 10.1007/s12033-015-9872-3.
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35. **Shariati L**, Validi M, Farrokhi E , Karimi A, Nafisi MR, Tabatabaiefar MA. **Staphylococcus aureus Isolates Carrying Panton-Valentine Leucocidin Genes: Frequency, Antimicrobial pattern, and Association with Infectious Disease.** Jundishapur J Microbiol. 2016 Jan 2;9(1):e28291. doi: 10.5812/jjm.28291. eCollection 2016.
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36. Mansoureh Shahbazi Dastjerdeh, Shirin Kouhpayeh, Faezeh sabzehei, Hossein Khanahamd, Mansour Salehi, Zahra mohammadi, **Laleh Shariati**, Zahra Hejazi, Parisa Rabiei, Mostafa Manian. **Zinc Finger Nuclease: A New Approach To Overcome Beta-lactam Antibiotic Resistance.** Jundishapur J Microbiol. 2016 Jan 2;9(1):e29384. doi: 10.5812/jjm.29384. eCollection 2016.
 37. Fatemeh Taghizade Mortezaee, · Morteza Hashemzadeh Chaleshtori, · Soleiman Kheiri, Effat Farrokhi, · **Laleh Shariati**, ·

Mohammad Amin Tabatabaiefar, · Sepideh Miraj. **Interleukin-1 B Gene polymorphisms in Iranian Patients with Uterine Fibroid, A Case- Control Study.** Biosciences Biotechnology Research Asia 05/2015; 12(1):341-345. DOI:10.13005/bbra/1671

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39. **Shariati L**, Validi M, Shojapour M, Tabatabaiefar MA, Karimi A, Nafisi MR. **Comparison of Real time PCR With Disk diffusion, Agar Screen and E-test Methods for Detection of Methicillin Resistant Staphylococcus aureus .***Curr Microbiol.* 2010 Dec;61(6):520-4.
40. Tabatabaiefar MA, Montazer zohour, M, **Shariati L**, Saffari Chaleshtori J, Ashrafi K, Farrokhi E, Hashemzadeh Chaleshtori M, Nooridalooi MR. **Mutation analysis of GJB2 and GJB6 genes and the genetic linkage analysis of five common DFNB loci in the Iranian families with non-syndromic hearing loss.** *J Sci I R Iran*,2010; 21(2): 105-112.
41. Tabatabaiefar MA, Alasti F, **Shariati L**, Farrokhi E, Ceuppens R, Nooridalooi MR, Hashemzadeh Chaleshtori M, Van Camp G. **DFNB93, a novel locus for autosomal recessive moderate-to-severe hearing impairment.** *Clin Genet.*2010 John, doi: 10.1111/j.1399-0004.2010.01593.x.
42. Tabatabaiefar MA, Alasti F, Montazer zohour M, **Shariati L**, Farrokhi E, Nooridalooi MR, Hashemzadeh Chaleshtori M, Van Camp G. **Genetic Linkage Analysis of 15 DFNB Loci in a Group of Iranian Families with Autosomal Recessive Hearing Loss.** *Iranian J Publ Health*, Vol. 40, No.2, 2011, pp.

**Publications
(In Farsi)**

Ali Hadi, Valiollah Mehrzad, Nazanin Vaziri, **Laleh Shariati**, Golnaz Vaseghi. **Measurement of pyruvate dehydrogenase enzyme in patients with diffuse large B-cell lymphoma relapse.** *Tehran University Medical Journal*, May 2020; Vol. 78, No. 2: 88-92.

Shariati L, Mohammadi Z, Hejazi Z, Modarres M, Salehi M, Modarresi MH, Khanahmad H. **Producing Integrase Minus Lentivirus for Transient Expression of the Desired Protein and Reduced Side Effects of the Virus in Gene Therapy.** [Journal of Isfahan Medical School, Vol. 33, No. 326, 2nd Week, May 2015]

Shariati L, Shojapour M, Validi M, Farrokhi E, Tabatabaiefar MA, Karimi A, Nafisi MR. **Detection of Methicillin and Vancomycin Resistance in coagulase negative Staphylococcus strains isolated from clinical samples of Shahrekord, Iran. 2008-2009.** (in Farsi) [*Iran South Med J*, 14,3,165-172].

Shariati L, Validi M, Shojapour M, Tabatabaiefar MA, Karimi A, Nafisi MR. **Comparison of the performance of Disk diffusion, Agar screening and E-test methods with Real-time PCR for the detection of methicillin resistant coagulase negative Staphylococcus strains isolated from clinical samples of Shahrekord university hospitals, 2008.** [*Iran South Med J*, 2010, In press].

Nafisi MR, **Shariati L** Validi M, Karimi A. **Prevalence of constitutive and inducible resistance to clindamycin in staphylococci isolates from Hajar and Kashani hospitals in Shahrekord, 2008.** *J Shahrekord Uni Med Sci*, 2010; 12(1): 13-20.

Tabatabaiefar MA, **Shariati L**, Montazer Zohour M, Ashrafi K, Saffari Chaleshtori J, Ghasemikhah R, Farrokhi E, Nooridalooi MR, Hashemzadeh Chaleshtori M. **Mutation screening of GJB2 and GJB6 and genetic linkage study of three prevalent DFNB loci in the Iranian families with autosomal recessive non-syndromic hearing loss,** [*Shahrekord Uni Med Sci J*, 12,2,65-75].

Shojapour M, **Shariati L**, Zamanzad B. **Prevalence of TEM-1 type beta-lactamase genes in Pseudomonas Aeruginosa strains isolated from burn infections using Duplex PCR.** Shahrekord, 2008. (in Farsi) [*Arak Uni Med Scie*, 14,1,55-61]

Shojapuor M, Validi M , Shariati L, Zamanzad B. **Determination of antimicrobial resistance pattern and Extended-Spectrum Beta Lactamases producing *Pseudomonas aeruginosa* strains isolated from clinical specimens of Hajar and Kashani Hospitals,Shahrekord 1387. (in Farsi)** *[Iran South Med J, 14,2,94-99]*.

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