

# CURRICULUM VITAE



## **Amir Ghaemi; Ph.D.**

**Date of birth:** January 27, 1980

### **Current Positions:**

- Associate professor, Pasteur Institute of Iran, Tehran, Iran
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### **Educations:**

**Ph.D. in Medical virology** (2005-2009)

Tarbiat Modares university (TMU),Tehran, Iran

**M.Sc. in Medical Virology** (2002-2005)

Tarbiat Modares University (TMU), Tehran, Iran.

GPA: 18.89/20.00

**B.Sc. in Microbiology** (1998-2002)

GPA: 16.46/20

### **Executive experiences:**

1. Director of biotechnology committee, Novel industrial Centre, 2010-2011
2. Advisor of biotechnology committee, Novel industrial Center, 2011-2012

3. Manager of Biotechnology department, Golestan university of medical sciences, 2010-2012
4. Member of research committee of infectious disease research Centre, Golestan university of medical sciences, 2010-2012
5. Member of research committee of Golestan university of medical sciences, 2012-2013
6. Secretary of Iranian Society for Virology; 2019-2023

## **PROFESSIONAL EXPERIENCE**

✓ 2020- 2022 Senior Researcher of recombinant vaccine design for SARS-Co2 virus

2018- 2022 Senior Researcher of DNA vaccine design for influenza virus; Pasteur Institute of Iran

Supervisor of four PhD students and two M.S. students

2015- 2022 Associate professor of Pasteur Institute of Iran; Oncolytic Viruses and Their Application to Cancer Treatment

Supervisor of three PhD students and three M.S. students

2010-2015 Golestan university of medical sciences, Design and development of cancer vaccines against human papillomavirus type.

Supervisor of four graduate students (M.S. students) and two PhD students

2005-2010 Ph.D. project, Thesis title: Design and construction of nanoparticle Lambda-phages for delivery of HPV- 16 E7 gene to animal cells and their immunological evaluation in tumor mice model

2005-2007 Study of gene therapy on latency and neurovirulence of Herpes Simplex Virus-1.

2002-2005 MS. project, Thesis title: Evaluation of Herpes Simplex Virus-1 latency in vaccinated mice after inoculation of DNA vaccine encoding gD-1 of HSV-1

## **Research Interests:**

- ✓ Influenza DNA Vaccines
- ✓ SARS-Co2 Vaccine
- ✓ Viral vaccine design
- ✓ Cancer Gene therapy
- ✓ Oncolytic therapy

## Honors:

- ❖ Ranked 1<sup>st</sup> among 480 examinees for the M.Sc. entrance exam, held by the Iranian ministry of science, research and technology. (2002)
- ❖ PhD Scholarship from ministry of health and medical education (2005)
- ❖ Iran National Elite foundation member. (2008)
- ❖ Outstanding national Student Award of Iran (National). (2009)
- ❖ The best researcher of Golestan province. (2010)
- ❖ Young Assistant Professor Grant from Iran National Elite foundation. (2010)
- ❖ The Best researcher of Golestan University of medical sciences (2010, 2011, 2013, 2015)

## Approved Grants:

1. Design and construction of nanoparticle Lambda-phages for delivery of HPV-16 E7 gene to animal cells and their evaluation as a booster-therapeutic vaccine in tumorigenic mice model. Iran food and drug organization. **Approval:** Golestan university of Medical sciences, **Position: Director, 2008.**
2. Design and construction of Lambda phage based- intelligent nanobioparticles as therapeutic vaccine against hepatitis C cancers. **Approval:** Golestan university of Medical sciences, **Position: Director, Golestan university of Medical sciences. 2009.**
3. Design and development of stem cell secreting immunosuppressive cytokines as a novel therapeutic approach against multiple sclerosis. **Approval:** Tehran university of Medical sciences, **Position: Co-Director, 2010.**
4. Design and production of chitosan nanoparticles as HPV-16 E7 gene carriers in cervical cancer tumor mice model, **Approval:** Golestan university of Medical sciences, **Position: Director, 2012**
5. Immunologic evaluation of DNA vaccine encoding influenza virus M2 gene (prime) and purified M2 protein (Booster) in type A-influenza mice model, **Approval:** Golestan university of Medical sciences, **Position: Director, 2013**
6. Design and administration of DNA vaccine- peptide of HPV-16 E7 antigen in prime- boost strategy and evaluation of its antitumor efficacy, **Approval:** Golestan university of Medical sciences, **Position: Director, 2013**
7. Assessment of DNA vaccine encoding human papillomavirus type 16 E7 gene adjuvanted with TLR 3,4,9 agonists for induction of antitumor responses. **Approval:** Golestan university of Medical sciences, **Position: Director, 2013**

- 8.** Antitumoral response assessment of Gemcitabine chemotherapy-DNA vaccine encoding HPV-16 E7 in papillomavirus type 16-associated tumor, **Approval:** Golestan university of Medical sciences, **Position: Director, 2014**
- 9.** Evaluation of DNA vaccine encoding HPV-16 E7- melatonin adjuvant in immune response induction in Human papillomavirus-associated tumor animal models. **Approval:** Golestan university of Medical sciences, **Position: Director, 2014**
- 10.** Comparing the efficacy of Influenza virosomes with chimeric Influenza-VSV virosomes for delivery of DNA vaccine in tumor mice model. **Approval:** Institute Pasteur of Iran **Position: Director, 2015**
- 11.** Application of avian Newcastle disease virus (NDV) in combination with influenza hemagglutinin Fusogenic membrane glycoproteins (FMGs) gene as novel therapy for murine model of human papillomavirus –induced cancer. **Approval:** Iran National Science Foundation (INSF, **Position: Director, 2017**
- 12.** Evaluation of influenza virosome potency as carrier of plasmid expressing influenza genes and GM-CSF as genetic adjuvant **Approval:** Pasteur Institute of Iran **Position: Director, 2017**
- 13.** Evaluation of immune response of virosome containing Synthetic Long peptide (SLP) of influenza virus using homologous prime-boost and heterologous (with gamma-inactivated influenza virus) in murine model. **Approval:** Pasteur Institute of Iran **Position: Director, 2017**
- 14.** Recombinant vaccine design for SARS-Co<sub>2</sub> virus, **Position: Director, 2020**

**Verified Peer- reviews (Publons) 144 review (ISI journals):**

1. Journal for ImmunoTherapy of Cancer 17 times
2. International Immunopharmacology 10 times
3. Scientific Reports-8 times
4. Journal of Experimental & Clinical Cancer Research 8 times
5. Cancer Immunology, Immunotherapy-4 times
6. Life Sciences- 3 times
7. Expert Opinion on Biological Therapy- 2 times
8. Cancer Gene Therapy- 2 times
9. Human Gene Therapy-2 times
10. Frontiers in immunology 2 times
11. Nature Biotechnology

**ISI selected Publications:**

**Scopus h-index:23; Citations: 1750 (by Jan. 1, 2023)**

**Google scholar: h-index:29; Citations: 2700**

1. Ghaemi A, P rishani, Zargaran H, Hashimi A, Abdolalipour E, Miri M, Recombinant COVID-19 vaccine based on recombinant RBD/Nucleoprotein and saponin adjuvant induces long-lasting neutralizing antibodies and cellular immunity, *Front immunol* 2022,
2. Miri SM, Pourhossein B, Hosseini SY, Keshavarz M, Shahmehmodi S, Zolfaghari MR, Mohebbi SR, Gorji A, Ghaemi A(Correspond Author).. Enhanced synergistic antitumor effect of a DNA vaccine with anticancer cytokine, MDA-7/IL-24, and immune checkpointblockade. *Virol J.* 2022 Jun 25;19(1)
3. Keshavarz M, Mohammad Miri S, Behboudi E, Arjeini Y, Dianat-Moghadam H, **Ghaemi A (Correspond Author)**.. Oncolytic virus delivery modulated immune responses toward cancer therapy: Challenges and perspectives. *Int Immunopharmacol.* 2022 Jul;108:108882.
4. Abdolalipour E, Mahooti M, Gorji A, Ghaemi A (**Correspond Author**). Synergistic Therapeutic Effects of Probiotic Lactobacillus casei TD-2 Consumption on GM-CSF-Induced Immune Responses in a Murine Model of Cervical Cancer. *Nutrition and Cancer.* 2022 Dec 26:1-11
5. Sabbaghi, A., Malek, M., Abdolah, S., Miri, S.M., Alizadeh, L., Samadi, M., Mohebbi, S.R., **Ghaemi, A (Correspond Author)**. A formulated poly (I:C)/CCL21 as an effective mucosal adjuvant for gamma-irradiated influenza vaccine *Virology Journal*, 2021: 18 (1), art. no. 201,
6. Samiee, F., Mohammadi, R., Shirian, S., Alijani, M.-R., Aledavood, A., Negahban, S., **Ghaemi, A (Correspond Author)**, Daneshbod, K., Daneshbod, Y. Spectrum of lymphoma subtypes based on the latest World Health Organization classification in southern Iran from 2000 to 2011 *Future Oncology*, 2021:17 (34), pp. 4733-4744.
7. Koushki, K., Salemi, M., Miri, S.M., Arjeini, Y., Keshavarz, M., **Ghaemi, A (Correspond Author)**. Role of myeloid-derived suppressor cells in viral respiratory infections; Hints for discovering therapeutic targets for COVID-19 *Biomedicine and Pharmacotherapy*, 2021: 144, art. no. 112346,
8. Rostaminia, S., Aghaei, S.S., Farahmand, B., Nazari, R., **Ghaemi, A (Correspond Author)**. Computational Design and Analysis of a Multi-epitope Against Influenza A virus *International Journal of Peptide Research and Therapeutics*, 2021: 27 (4), pp. 2625-2638.
9. Tanhaei, M., Mohebbi, S.R., Hosseini, S.M., Rafieepoor, M., Kazemian, S., Ghaemi, A., Shamloe, S., Mirjalali, H., Asadzadeh Aghdaei, H., Zali, M.R. The first detection of SARS-CoV-2 RNA in the wastewater of Tehran, Iran *Environmental Science and Pollution Research*, 2021: 28 (29), pp. 38629-38636.
10. Keshavarz, M., Sabbaghi, A., Koushki, K., Miri, S.M., Sarshari, B., Vahdat, K., **Ghaemi, A (Correspond Author)**. Epigenetic reprogramming mechanisms of immunity during influenza A virus infection *Microbes and Infection*, 2021, 23 (8), art. no. 104831,
11. Mozaffari Nejad, A.S., Noor, T., Munim, Z.H., Alikhani, M.Y., **Ghaemi, A (Correspond Author)**.. A bibliometric review of oncolytic virus research as a novel approach for cancer therapy. *Virology Journal*, 2021, 18 (1), art. no. 98.
12. Farahtaj, F., Gholami, A., Khosravy, M.S., Gharibzadeh, S., Niknam, H.M., **Ghaemi, A (Correspond Author)**. Enhancement of immune responses by co-stimulation of TLR3 - TLR7 agonists as a

potential therapeutics against rabies in mouse model. Microbial Pathogenesis, 2021,157, art. no. 104971

13. Farahtaj, F., Alizadeh, L., Gholami, A., Khosravy, M.S., Bashar, R., Gharibzadeh, S., Niknam, H.M., **Ghaemi, A(Correspond Author)**. Differential pathogenesis of intracerebral and intramuscular inoculation of street rabies virus and CVS-11 strains in a mouse model. Iranian Journal of Basic Medical Sciences, 2021,24 (7), pp. 943-950.
14. Shoraka, S., Ferreira, M.L.B., Mohebbi, S.R., **Ghaemi, A.** SARS-CoV-2 Infection and Guillain-Barré Syndrome: A Review on Potential Pathogenic Mechanisms. Frontiers in Immunology 2021, 12, art. no. 674922, **IF:7.51**
15. Sabbaghi A, Zargar M, Zolfaghari MR, Motamedi-Sedeh F, Ghaemi A (**Correspond Author**). Protective cellular and mucosal immune responses following nasal administration of a whole gamma-irradiated influenza A (subtype H1N1) vaccine adjuvanted with interleukin-28B in a mouse model. Archives Virology. 2021 Jan 6:1–13
16. Sabbaghi A, Miri SM, Keshavarz M, Mahooti M, Zebardast A, Ghaemi A (**Correspond Author**) . Role of  $\gamma\delta$  T cells in controlling viral infections with a focus on influenza virus: implications for designing novel therapeutic approaches. Virol J. 2020 Nov 12;17(1):174
17. Mir SM, Cho W, Tafsiri E, Ghaemi A(**Correspond Author**). CRISPR-Cas, a robust gene-editing technology in the era of modern cancer immunotherapy, Cancer Cell International, 2020, 20(1), 456.
18. Mahooti M, Miri SM, Abdolalipour E, Ghaemi A(**Correspond Author**). The immunomodulatory effects of probiotics on respiratory viral infections: A hint for COVID-19 treatment? Microbial Pathogenesis. 2020 Aug 18;148:104452.
19. Miri SM, Ebrahimzadeh MS, Abdolalipour E, Yazdi M, Hosseini Ravandi H, Ghaemi A (**Correspond Author**). Synergy between hemagglutinin 2 (HA2) subunit of influenza fusogenic membrane glycoprotein and oncolytic Newcastle disease virus suppressed tumor growth and further enhanced by Immune checkpoint PD-1 blockade. Cancer Cell International. 2020 Aug 7;20:380. \
20. Mozaffari Nejad AS, Fotouhi F, Mehrbod P, Keshavarz M, Alikhani MY, Ghaemi A (**Correspond Author**). Oncolytic effects of Hitchner B1 strain of newcastle disease virus against cervical cancer cell proliferation is mediated by the increased expression of cytochrome C, autophagy and apoptotic pathways. Microbial Pathogenesis. 2020 Aug 7;147:104438. ,
21. Higher prevalence of asymptomatic or mild COVID-19 in children, claims and clues.Miri SM, Noorbakhsh F, Mohebbi SR, **Ghaemi A (Correspond Author)**. J Medical Virology. 2020 May 29:10.1002/jmv.26069. doi: 10.1002/jmv.26069.
22. Virotheranostics, a double-barreled viral gun pointed toward cancer; ready to shoot. Keshavarz M, Sabbaghi A, Miri SM, Rezaeyan A, Arjeini Y, **Ghaemi A (Correspond Author)** Cancer Cell International, 2020, 20,1:1-17.
23. Oncolytic Newcastle disease virus delivered by Mesenchymal stem cells-engineered system enhances the therapeutic effects altering tumor microenvironment, Keshavarz M, Ebrahimzadeh S, Miri M, Dianat-Moghadam H, Ghorbanhosseini S, Mohebbi SR, Keyvani H, **Ghaemi A (Correspond Author)**. Virology Journal, 2020, 17:64.

- 24.** Evaluation of the antitumor immune responses of probiotic *Bifidobacterium bifidum* in human papillomavirus-induced tumor model. Abdolalipour, E., Mahooti, M., Salehzadeh, A., Torabi, A., Mohebbi, S.R., Gorji, A., Ghaemi A (Correspond Author). *Microbial Pathogenesis*, 2020, 145,104207,
- 25.** Association of Interleukin-17 gene polymorphisms with susceptibility to chronic hepatitis B virus infection and clearance in Iranian population. Tayefinasrabiadi, H., Mohebbi, S.R., Hosseini, S.M., Azimzadeh, P., Pourhoseingholi, M.A., **Ghaemi, A.**, Sharifian, A., Asadzadeh Aghdaei, H., Zali, M.R. *Microbial Pathogenesis*, 2020 144,104195,
- 26.** Gut-brain Axis and migraine headache: A comprehensive review. Arzani, M., Jahromi, S.R., hiria Ghorbani, Z., Vahabizad, F., Martelletti, P., **Ghaemi, A.**, Sacco, S., Togha, M. *Journal of Headache and Pain*, 2020, 21 (1),15.
- 27.** Evaluation of Inflammatory State in Migraineurs: A Case-control Study. Togha M, Razeghi Jahromi S, Ghorbani Z, Ghaemi A, Rafiee P. *Iran J Allergy Asthma Immunol*. 2020 May 17;19(S1):83-90. .
- 28.** Oncolytic Newcastle disease virus reduces growth of cervical cancer cell by inducing apoptosis. Keshavarz, M., Nejad, A.S.M., Esghaei, M., Bokharaei-Salim, F., Dianat-Moghadam, H., Keyvani, H., **Ghaemi A (Correspond Author)**. *Saudi Journal of Biological Sciences*, 2020, 27 (1), pp. 47-52.
- 29.** An investigation of oxidant/antioxidant balance in patients with migraine: A case-control study. Togha, M., Razeghi Jahromi, S., Ghorbani, Z., **Ghaemi, A.**, Rafiee, P. *BMC Neurology*, 2019, 19 (1), 323.
- 30.** Inactivation methods for whole influenza vaccine production. Sabbagh A, Miri SM, Keshavarz M, Zargar M, **Ghaemi A (Correspond Author)**. *Rev Med Virol*. 2019 Jul 23:e2074. doi: 10.1002/rmv.2074.
- 31.** Oncolytic paramyxoviruses-induced autophagy; a prudent weapon for cancer therapy.Keshavarz M, Solaymani-Mohammadi F, Miri SM, **Ghaemi A (Correspond Author)**. *J Biomed Sci*. 2019 Jun 19;26(1):48. doi: 10.1186/s12929-019-0542-9. Review.
- 32.** Human rotavirus in Iran; molecular epidemiology, genetic diversity and recent updates on vaccine advances Tavakoli Nick S, Mohebbi SR, Ghaemi A, Hosseini SM *Gastroenterol Hepatol Bed Bench*. 2019 Spring;12(2):98-109. Review.
- 33.** Immunomodulatory and prophylactic effects of *Bifidobacterium bifidum* probiotic strain on influenza infection in mice. Mahooti M, Abdolalipour E, Salehzadeh A, Mohebbi SR, Gorji A, **Ghaemi A (Correspond Author)**. *World J Microbiol Biotechnol*. 2019 Jun 3;35(6):91. doi: 10.1007/s11274-019-2667-0.
- 34.** A gene variation of Interferon Gamma Receptor-I promoter (rs1327474A>G) and chronic hepatitis C virus infection.Karkhane M, Mohebbi SR, Sharifian A, Ghaemi A, Asadzadeh Aghdaei H, Zali MR *Gastroenterol Hepatol Bed Bench*. 2019 Winter;12(1):46-51.
- 35.** Non-replicating Newcastle Disease Virus as an adjuvant for DNA vaccine enhances antitumor efficacy through the induction of TRAIL and granzyme B expression. Mohebbi A, Ebrahimzadeh MS, Baghban Rahimi S, Saeidi M, Tabarraei A, Mohebbi SR, Shirian S, Gorji A, **Ghaemi A (Correspond Author)**. *Virus Res*. 2019 Feb;261:72-80.
- 36.** Natural Infection with Rabies Virus: A Histopathological and Immunohistochemical Study of Human Brains. Farahtaj F, Alizadeh L, Gholami A, Tahamtan A, Shirian S, Fazeli M, Nejad ASM, Gorji A,

Niknam HM, **Ghaemi A(Correspond Author)**. Osong Public Health Res Perspect. 2019 Feb;10(1):6-11.

37. Vaccination with three tandem repeats of M2 extracellular domain fused to Leismania major HSP70 protects mice against influenza A virus challenge. Shokouhi H, Farahmand B, **Ghaemi A**, Mazaheri V, Fotouhi F. Virus Res. 2018 Jun 2;251:40-46.
38. Antitumor Immunity Induced by Genetic Immunization with Chitosan Nanoparticle Formulated Adjuvanted for HPV-16 E7 DNA Vaccine. Tahamtan A, Barati M, Tabarraei A, Mohebbi SR, Shirian S, Gorji A, **Ghaemi A (Correspond Author)**. Iran J Immunol. 2018 Dec;15(4):269-280.
39. Enhancement of therapeutic DNA vaccine potency by melatonin through inhibiting VEGF expression and induction of antitumor immunity mediated by CD8+ T cells. Baghban Rahimi S, Mohebbi A, Vakilzadeh G, Biglari P, Razeghi Jahromi S, Mohebbi SR, Shirian S, Gorji A, **Ghaemi A (Correspond Author)**. Arch Virol. 2018 Mar;163(3):587-597.
40. Adjuvant use of the NKT cell agonist alpha-galactosylceramide leads to enhancement of M2-based DNA vaccine immunogenicity and protective immunity against influenza A virus. Fotouhi F, Shaffifar M, Farahmand B, Shirian S, Saeidi M, Tabarraei A, Gorji A, **Ghaemi A (Correspond Author)**. Archive of Virol. 2017; 162:1251–1260
41. Synergistic effect of programmed cell death protein 1 blockade and secondary lymphoid tissue chemokine in the induction of anti-tumor immunity by a therapeutic cancer vaccine, Moeini S, Saeidi M, Fotouhi F, Mondanizadeh M, Shirian S, Mohebbi A, Gorji A, **Ghaemi A (Correspond Author)** . Archive of Virol. 2017; 162:333-346
42. Astrocyte-mediated inflammation in cortical spreading depression. Ghaemi A (First Author), Alizadeh L, Babaei S, Jafarian M, Khaleghi Ghadiri M, Meuth SG, Kovac S, Gorji A. Cephalgia. 2017 Jan 1:0333102417702132.
43. Spectrum of pediatric tumors diagnosed by fine-needle aspiration cytology. Medicine (Baltimore). Shirian S, Daneshbod Y, Haghpanah S, Khademi B, Noorbakhsh F, **Ghaemi A**, Mosayebi Z. 2017 Feb;96(6):e5480.
44. Rapamycin Augments Immunomodulatory Properties of Bone Marrow-Derived Mesenchymal Stem Cells in experimental autoimmune encephalomyelitis, toghae M, Jahanshahi M, Alizadeh L, Razeghi S, Gorji A and **Ghaemi A (Correspond Author)**, Mol Neurobiol 2016 10.1007/s12035-016-9840-3
45. Combination of the Toll like receptor agonists and  $\alpha$ -Galactosylceramide as an Efficient Adjuvant for Cancer Vaccine, Gableh F, Saeedi M, Hamdi K, Gorji A, **Ghaemi A(Correspond Author)**, Journal of biomedical science, 2015 25(23)1:16-
46. Chitosan Nanoparticles as a potential non-viral gene delivery for HPV-16 E7 into mammalian cells, Tahamtan A, Tabarraei A, Moradi A, Dinarvand M, Kelishadi M, , Fatemeh Atyabi F, **Ghaemi A (Correspond Author)**, Artificial Cells, Nanomedicine and Biotechnology 2015, 43: 366–372.
47. The Effect of Melatonin on Behavioral, Molecular, and Histopathological Changes in Cuprizone Model of Demyelination. Vakilzadeh G, Khodagholi F, Ghadiri T, **Ghaemi A**, Noorbakhsh F, Sharifzadeh M, Gorji A, Mol Neurobiol. 2015 Aug 27
48. Immunomodulatory Effect of Toll-Like Receptor-3 Ligand Poly I:C on Cortical Spreading Depression. **Ghaemi A**, Sajadian A, Khodaie B, Lotfinia A, Lotfinia M, Aghabarari F, Khaleghi Ghadiri M, Meuth A, Gorji A. Mol Neurobiol 2015 DOI 10.1007/s12035-014-8995-z.

49. Antitumor effect of therapeutic HPV DNA vaccines with Chitosan-Based Nanodelivery Systems, Tahamtan A, **Ghaemi A (Correspond Author)**, Gorji A, Kalhor HR, Sajadian A, Tabarrai A, Moradi A, Atyabi F, Kelishadi M, Journal of biomedical science, 2014 31;21:69.
50. DNA vaccine encoding HPV-16 E7 with mutation in L-Y-C-Y-E pRb-binding motif induces potent anti-tumor responses in mice, Alagheband Bahrami A, **Ghaemi A (Correspond Author)**, Tabarrai A, Sajadian A, Gorji A, Soleimanjahi H. Journal of Virological Methods 2014 206 (2014) 12–18
51. Enhanced Cell Immune Responses to Hepatitis C Virus Core by Novel Heterologous DNA Prime/Lambda Nanoparticles Boost in Mice, Saeedi A, **Ghaemi A (Correspond Author)**, Tabarrai A, Moradi A , Gorji A, Semnani S, Soleimanjahi H, Hosseinzadeh Adli A, Hosseini SY, Vakili MA, Virus Genes, 2014,49(1):11-21.
52. Comparing the effect of Toll-Like Receptor Agonist adjuvants on the efficiency of the DNA vaccine, Sajadian A, Tabarrai A, Soleimanjahi H, Moradi A, Fotouhi F, Gorji A, **Ghaemi A (Correspond Author)**, Archive of virology, 2014, 159(8):1951-1960.
53. Chitosan Nanoparticles as a potential non-viral gene delivery for HPV-16 E7 into mammalian cells, Tahamtan A, Tabarrai A, Moradi A, Dinarvand M, Kelishadi M, Atyabi F, **Ghaemi A (Correspond Author)**, Artificial Cells, Nanomedicine and Biotechnology 2014 DOI: 10.3109/21691401.2014.893522.
54. Immunogenicity evaluation of a DNA vaccine expressing the Hepatitis C Virus NS2 gene in C57BL/6 mice, Gorzin Z, Gorzin A, Tabarrai A, Behnampour N, Irani S, Gorji A, **Ghaemi A (Correspond Author)**, Iranian Biomedical journal, 2014,18(1):1-7.
55. Protective Effect of a cAMP Analogue on Behavioral Deficits and Neuropathological Changes in Cuprizone Model of Demyelination, Vakilzadeh G, Khodagholi F,Ghadiri T,Darvishi M, **Ghaemi A**, Noorbakhsh F, Gorji A, Sharifzadeh M, Molecular Neurobiology,2015, 52(1):130-141.
56. Alleviation of experimental allergic encephalomyelitis in C57BL/6 mice by soy daidzein, Razegh S, Areffhosseini SR, **Ghaemi A**, Toghae M, Iranian Journal of Allergy, Asthma and Immunology, 2014,13(4):256-264.
57. Interleukin-12 as a genetic adjuvant enhances hepatitis C virus NS3 DNA vaccine immunogeneity, Naderi M, Saeedi A, Kelishadi M, Moradi A, Gorji A, **Ghaemi A (correspond Author)**, Virologica Sinica. 2013,28(3): 167-173.
58. HSP70 modified response against HPV based tumor, Farzanehpour M, Soleimanjahi H, Hassan ZM, Amanzadeh A, **Ghaemi A**, Fazeli M, European Review for Medical and Pharmacological Sciences ERMPS, 2013,17:228-234.
59. Genistein Induces a Protective Immunomodulatory Effect in a Mouse Model of Cervical Cancer, **Ghaemi A (Correspond Author)**, Soleimanjahi H, Razeghi S, Gorji A Tabarrai A, Iranian Journal of immunology 2012;9(2):119-127.
60. Lambda Phage nanoparticles for Targetomics, **Ghaemi A (Correspond Author)**, Tabarrai A, Soleimanjahi H, Gorji A, Biotechnology 2012; 11(2): 95-99.
61. Mutations in the S gene region of hepatitis B virus genotype D in Golestan Province-Iran. Moradi A, Zhand S, **Ghaemi A**, Javid N, Tabarrai A. Virus Genes. 2012;44:382-387.

62. Tissue Inhibitors of Matrix Metalloproteinase-3, potential therapeutic target against Multiple sclerosis. **Ghaemi A (Correspond Author)**, Hamdi K, Togha M, Kazemi H, Gorji A, American Journal of Biochemistry and Molecular biology 2012;2(3): 195-199.
63. Protection of mice by a Lambda-based therapeutic vaccine against HPV16-associated cancer. **Ghaemi A**, Soleimanjahi H, Gill P, Hassan Z, Razeghi S, Fazeli M, Razavinikoo MH, Intervirology 2011; 19;54(3):105-112.
64. Efficacy of HPV-16 E7 Based Vaccine in a TC-1 Tumorigenic Animal Model of Cervical Cancer. Fazeli M, Soleimanjahi H, **Ghaemi A**, Farzanehpour M, Amanzade A, Hashemi R, Cell Journal 2011;12(4): 483-488.
65. Recombinant Lambda-phage nanobioparticles for tumor therapy in mice models. **Ghaemi A**, Soleimanjahi H, Gill P, Hassan Z, Razeghi S, Roohvand F, Genetic Vaccine and Therapy 2010;8(3):1-7.
66. Localization of Herpes Simplex Virus Type 1 DNA in Latently Infected BALB/c Mice Neurons Using in situ Polymerase Chain Reaction. Khansarinejad B, Soleimanjhai H, **Ghaemi A**, taki T, Iranian Biomedical Journal 2010;14 (3): 83-88.
67. Echinacea purpurea Polysaccharide Reduces the Latency Rate in Herpes Simplex Virus Type-1 Infections. **Ghaemi A (Correspond Author)**, Soleimanjahi H, Gill P, Arefian E, Soudi S, And Hassan Z. Intervirology 2009;52:29–34.
68. Virulence Increasing of *Salmonella typhimurium* in Balb/c Mice After Heat-Stress Induction of Phage Shock Protein A. Hassani AS, Amirmozafari N, **Ghaemi, A (Correspond Author)**, Current Microbiology. 2009; 59:446-450.
69. A Kinetic Study of Gamma Interferon Production in Herpes Simplex Virus-1 DNA Prime-Protein Boost Regimen Comparing to DNA or Subunit Vaccination. Arefian E, Bamdad T, Soleimanjahi H, Akhoond M, Parsania M, **Ghaemi A**. Cell Molecular Biology, 2009; 43 (3):388–393.
70. Phage shock protein G, a Novel Ethanol Induced Stress Protein in *Salmonella typhimurium*. Shoae hassani A, Malekzadeh F, Amirmozafari N, Hamdi K, Ordouzadeh N, **Ghaemi A. (Correspond Author)**. Current Microbiology. 2009; 58:239-244.
71. In vitro inhibition of *Helicobacter pylori* urease with non and semi fermented *Camellia sinensis*. Shoae hassani A, Ordouzadeh N, Hamdi K, **Ghaemi A. (Correspond Author)** Nazari R, Amirmozafari N. Indian Journal of Medical Microbiology. IJMM. 2009;27(1):30-34.
72. Nucleic Acid Isothermal Amplification Technologies - A Review, Gill P and **Ghaemi A**. Nucleoside, nucleotide and nucleic acid. NNNA. 2008; 27:224–243.
73. Nanodiagnostic Method for Colorimetric Detection of *Mycobacterium tuberculosis* 16S rRNA. Gill P, Ghalami M, **Ghaemi A**, Mosavari N, Abdul-Tehrani H, Sadeghizadeh M. Nanobiotechnology 2008; 4: 28-35.
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## Patents:

- Prophylactic effect of *Echinacea purpurea* extract on ocular disease caused by HSV-1. **A. Ghaemi** and H. Soleimanjahi, **Iranian patent office**.

## Books:

**Sabbaghi A, Ghaemi A.** Molecular Adjuvants for DNA Vaccines: Application, Design, Preparation, and Formulation. **Springer Protocols book series , Methods in Molecular Biology**, DNA Vaccines, Methods and Protocols, . 2021;2197:87-112. PMID: 32827133. DOI: <https://doi.org/10.1007/978-1-0716-0872-2> (MIMB, volume 2197)

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1. 10 Student (M.Sc student of Azad University- Microbiology- Biotechnology) 2009-2018
2. 3 Student (M.Sc student of Golestan university of medical sciences- Biotechnology) 2011-2014
3. 7 Student (M.Sc student of Golestan university of medical sciences- Virology) 2011-2016
4. 4 Student (PhD student of Tehran university of medical sciences- Virology) 2015-2020
5. 6 Student (PhD student of Azad University - Microbiology) 2015-2020

## **Nucleotides in NCBI**

1. Synthetic construct E7 protein (E7) gene, complete cds, GenBank: KC344538
2. Synthetic construct E7 protein (E7) gene, complete cds, GenBank: KC410871.1
3. Hepatitis B virus isolate GOR-1391 core protein gene, partial cds, GenBank: KC928094.1
4. Hepatitis B virus isolate GOR-1390-1 S protein (S) gene, partial cds, GenBank: KC633131.1

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