

CURRICULUM VITAE



ARASH ARASHKIA

Gender: Male

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Marital Status: Married

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ACADEMIC PROFILE

- **Academic Position:** Assistant Professor
- **Academic Degree:** PhD
- **Research Center:** Pasteur Institute of Iran
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- **ResearchGate Profile:** https://www.researchgate.net/profile/Arash_Arashkia2
- **Scopus Profile:** <https://www.scopus.com/authid/detail.uri?authorId=29367579700>
- **Google Scholar Profile:** <https://scholar.google.com/citations?user=VMrajREAAAAJ&hl=en&oi=sra>
- **PubMed Articles:** <https://www.ncbi.nlm.nih.gov/pubmed?term=Arashkia>
- **ISI Articles:**
http://apps.webofknowledge.com/summary.do?product=WOS&parentProduct=WOS&search_mode=GeneralSearch&parentQid=&qid=1&SID=Y1ArKGhn9WPwtKJcF4H&&update_back2search_link_param=yes&page=1

EDUCATIONS

- **Associated Diploma in Laboratory Technology**, 1994-1996: Gilan University of Medical Sciences, Rasht, Iran.
- **BSc in Laboratory Technology**, 1997-1999: Shahid Beheshti University of Medical Sciences, Tehran, Iran.
- **MSc in Medical Biotechnology**, 2000-2003: Tarbiat Modares University, Tehran, Iran.
- **PhD in Medical Biotechnology**, 2003-2009: Pasteur Institute of Iran, Tehran, Iran.

SKILLS

- **Computer Sciences:** Microsoft Windows, Microsoft Office, Data search engines.
- **Research Knowledge:** Biomedical literature mining, Bioinformatics and Immunoinformatics (Nucleic acid and protein sequence retrieval and alignment, Primer design, epitope-based vaccine design), Statistical analysis for immune response assays.
- **Laboratory Techniques:** Gene amplification, detection, and manipulation (DNA/RNA extraction methods, PCR, real-time PCR, DNA cloning, blotting techniques); immunological, biochemical and microbiological techniques (vaccine studies, handling small laboratory animals, ELISA, ELISPOT, CTL assay, flow cytometry, electrophoresis, recombinant protein expression and purification, gene transfer to bacterial and mammalian cells, virus culture and some virus infectivity assays).

PROFESSIONAL MEMBERSHIPS

- 2009-2011, Postdoctoral Fellow, Virology Department, Pasteur Institute of Iran, Tehran, Iran.
- 2012-Present: Assistant Professor, Molecular Virology Department, Pasteur Institute of Iran, Tehran, Iran.

MANAGEMENT EXPERIENCES

1. 2015-Present: Head of Molecular Virology Department, Pasteur Institute of Iran, Tehran, Iran.
2. 2012-Present: Head of Virology Laboratory, Shemiran Branch, Pasteur Institute of Iran, Tehran, Iran.

TEACHING EXPERIENCES

1. Human Papillomavirus Vaccine, Pasteur Institute of Iran, Tehran, Iran.
2. Reverse Vaccinology, Pasteur Institute of Iran, Tehran, Iran.
3. Techniques in Diagnostic Virology, Pasteur Institute of Iran, Tehran, Iran.
4. Immunity in Viral Infection, Pasteur Institute of Iran, Tehran, Iran.
5. Biosafety, Pasteur Institute of Iran, Tehran, Iran.
6. Genetic Engineering, Tehran University of Medical Sciences, Tehran, Iran.
7. Medical Biotechnology, Alzahra University, Tehran, Iran.
8. Pharmaceutical Biotechnology, Alzahra University, Tehran, Iran.

WORKSHOPS AND TRAINING COURSES

1. Scientific Lecturer in "Methods of viral gene transfer to mammalian cells by common vectors", 12-14 September 2015, Pasteur Institute of Iran, Tehran, Iran.
2. Scientific instructor in "Master Trainer Program for Laboratory Biosafety and Risk Management", 7-11 September 2015, University of Veterinary and Animal Sciences, Lahore, Pakistan.
3. Scientific instructor in "Primer Design and Introduction to NCBI", 1 February 2015, Winter school of Pasteur Institute of Iran, Tehran, Iran.
4. Scientific instructor in "Immunoinformatics and Vaccine Development", April 29- 2 May 2014, 12th International Congress of Immunology and Allergy, Tehran, Iran.
5. Scientific instructor in "Vaccination in special cases" 29-30 October 2014, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

HONORS AND AWARDS

1. Second rank in PhD entrance exam, 2003, Pasteur Institute of Iran, Tehran, Iran.
2. Third rank in MSc entrance exam, 2000, Tarbiat Modares University, Tehran, Iran.
3. First rank as BSc graduate, 1999, Shahid Beheshti University of Medical Sciences, Tehran, Iran.

MEETINGS AND CONGRESSES

1. 13th International Congress Immunology and Allergy of Iran. April 2016, Tabriz, Iran, Construction of a trispesific antibody (tsAb) encoding IL-15 for cancer immunotherapy via retargeting NK cells to Newcastle disease virus (NDV)-infected tumor cells.
2. 17th International and Iranian Congress of Microbiology. August 2016, Tehran, Iran, Detection of circulating human norovirus in children less than 5 years with acute gastroenteritis by genogroup specific real-time PCR.
3. 7th International Congress of Laboratory and Clinic. February 2015, Tehran, Iran, Necessity of laboratory testing facility in Ebola virus isolation unit.
4. 7th International Congress of Laboratory and Clinic. February 2015, Tehran, Iran, Laboratory-associated biosafety for blood borne viruses.
5. 14th International and Iranian Congress of Microbiology. August 2013, Tehran, Iran, Epitope Prediction for Different Protein of Human Papillomavirus (HPV) as Initial Step for Production of Universal Vaccine.
6. The 13th Iranian & the Second International Congress of Microbiology. July 2012, Ardabil, Iran, Frequency of Broad-Spectrum Beta-Lactamase Genes among *Escherichia coli* Strains isolated from Urinary Tract- Infected Outpatients in Tehran.
7. Frontiers of Retrovirology 2011, October 2011, Amsterdam, The Netherlands, IFN- α 2b reduces released particles of Human T-lymphotropic Virus-I from HTLV-I transformed cell line.
8. Microbiotec 11. December 2011, Braga, Portugal, Expression of recombinant Core, E1, E2-HCV proteins in Sf9 insect cells.
9. 11th National Congress of Microbiology and 1st Eastern Mediterranean Congress of Microbiology, August 2010, Rasht, Iran, Cloning, expression optimization and purification of hepatitis C virus NS3 protein in *E. coli*.
10. 5th Virology and 1st Vaccine Congress of Iran, May 2009, Karaj, Iran, Evaluation of two HCV subdominant epitope immunogenicity in transgenic mice and the effect of helper factors.
11. Research on Infectious Diseases: A Global Challenge, June 2008, Institut Pasteur, Paris, France, French-Iranian collaborative studies on HCV vaccines (CD8-polytopic DNA constructs and protein based immunogens as therapeutic and prophylactic vaccine candidates).
12. 1st Vaccine Congress, Dec. 2007, Amsterdam, the Netherlands, Construction and evaluation of CD8-polytope DNA constructs based on immunodominant and sub-dominant HCV epitopes.
13. 5th National Biotechnology Congress of Iran, Nov. 2007, Tehran, Iran, A study on the effect of ER signals sequence and a Pan-DR epitope (PADRE) on the immunogenicity of a CTL-based HCV epitope.
14. 5th National Biotechnology Congress of Iran, Nov. 2007, Tehran, Iran, Engineering, construction and primary evaluation of multi-epitope DNA construct based on immunodominant HCV epitopes.
15. 14th International Symposium on Hepatitis C Virus and Related Viruses, Sept. 2007, Glasgow, Scotland, Construction and Evaluation of CD8-polytope DNA constructs based on immunodominant and sub-dominant HCV epitopes.
16. 3rd Iranian Congress of Virology, Jan 2006, Tehran, Iran, R222 K mutation in HTLV-1 Tax protein abrogates stimulatory effect on NF- κ B pathway.
17. 1st National Congress of Molecular Cell Biology, Feb 2003, Ahwaz, Iran, Cloning and evaluation of diagnostic value of HBeAg produced with extra 6xHis-tag epitopes in an optimized expression condition in *E. coli*.
18. 8th Iranian Genetics Congress, May 2003, Tehran, Iran, Exploiting the His-tag based, one-step purification systems for expression of interested genes, A comparative study on productivity / yield for genes of HCV-core, HBeAg and streptokinase (SK)
19. Proceedings of the 3rd National congress of Biotechnology, pp 127-130, September 2003, Mashad, Iran, Cloning, optimization of expression condition, purification and characterization of HBeAg produced in *E. coli* with extra His-tag epitopes.

RESEARCH ACTIVITIES (GRANTS RECEIVED)

1. Arash Arashkia, Construction and evaluation of human papillomavirus genotypes 16 and 18 pseudovirions in 293FT cell line, 2013, No.649, Pasteur Institute of Iran, Tehran, Iran.
2. Arash Arashkia, Farzin Roohvand, Immunoinformatic analyses, expression and purification of a selected-mutant of human papillomavirus (HPV) 16-E7 protein and formulation with human compatible adjuvants (and mucosal immunization capability) as a candidate vaccine for HPV-associated cancers, 2017, No.857, Pasteur Institute of Iran, Tehran, Iran.

PUBLISHED ARTICLES

1. Arashkia A, Roohvand F, Sadat SM, Forouzandeh M, Amini S, Andalibi S. Purification and characterization of a His-tagged recombinant HBeAg with physiologically natural structure cloned and expressed in E.coli. *Physiology and Pharmacology*. 2004;8:125-35.
2. Azadmanesh K, Roohvand F, Amini S, Arashkia A, Kazanjy M. Evaluation of stimulatory effects of HTLV-1 Tax protein on CREB and NF- κ B related signaling pathways using two B- Galactosidase based reporter plasmids. *Cell Journal (Yakhteh)*. 2005;6(24):218-25.
3. Memarnejadian A, Roohvand F, Arashkia A, Berjisian F, Aghasadeghi MR. Designing, constructing and immunologic evaluation of polytope DNA constructs by the application of hepatitis C virus immunodominant epitopes in BALB/c mice. *Cell Journal (Yakhteh)*. 2009;11(2):122-33.
4. Memarnejadian A, Roohvand F, Arashkia A, Rafati S, Shokrgozar MA. Polytope DNA vaccine development against hepatitis C virus: a streamlined approach from in silico design to in vitro and primary in vivo analyses in BALB/c mice. *Protein and peptide letters*. 2009;16(7):842-50.
5. Arashkia A, Roohvand F, Memarnejadian A, Aghasadeghi MR, Rafati S. Construction of HCV-polytope vaccine candidates harbouring immune-enhancer sequences and primary evaluation of their immunogenicity in BALB/c mice. *Virus genes*. 2010;40(1):44-52.
6. Arashkia A, Roohvand F, Memarnejadian A, Aghasadeghi MR, Sadat SM, Alizadeh S, et al. Immunoinformatics modeling, construction of DNA plasmids Carrying CTL epitopes of hepatitis C virus and their preliminary immunological analysis. *Iran J Med Microbiol* 2011;4(4):30-40.
7. Sohrabi A, Norouzfaz ZS, Eslamifaz A, Arashkia A, Azadmanesh K. Isolation of *Cupriavidus metallidurans* from razor blade during paraffin embedded tissue sectioning. *Clinical laboratory*. 2011;57(7-8):641.
8. Amini S, Alavian SM, Mostafavi E, Vahabpour R, G. B, Aghasadeghi MR, et al. Presence of plus-strand HCV RNA in serum and PBMCs as an indicator for relapse and resistance to IFN therapy in patients infected by HCV. *Future Virology*. 2012;7(3):323-30.
9. Azadmanesh K, Norouzfaz ZS, Sohrabi A, Safaie-Naraghi Z, Moradi A, Yaghmaei P, et al. Characterization of human herpes virus 8 genotypes in Kaposi's sarcoma patients in Tehran, Iran. *International journal of molecular epidemiology and genetics*. 2012;3(2):144-52.
10. Yazdani-Neyshabouri S, Aghasadeghi M. R, Jahanian-Najafabadi A, Bouzari S, Arashkia A, Sadat M, et al. Expression of recombinant Hepatitis C virus (HCV) Core, E1 and E2 proteins by the baculovirus expression vector system. *African Journal of Microbiology Research*. 2012;6(19):4152-7.
11. Fadavi P, Rostamian M, Arashkia A, Shafaghi B, Niknam HM. Epstein-barr virus may not be associated with breast cancer in Iranian patients. *Oncology Discovery*. 2013;1(1).
12. Hartoonian C, Sepehrizadeh Z, Mahdavi M, Arashkia A, Jang YS, Ebtekar M, et al. Modulation of hepatitis C virus core DNA vaccine immune responses by co-immunization with CC-chemokine ligand 20 (CCL20) gene as immunoadjuvant. *Molecular biology reports*. 2014;41(9):5943-52.
13. Etemadzadeh MH, Arashkia A, Roohvand F, Ahani R, Mohajel N, Baniasadi V, et al. Expression of a biotin acceptor peptide-containing protein with potential incorporation on the lentiviral envelope as a viral surface engineering platform. *Research in pharmaceutical sciences*. 2015;10(4):268-74.
14. Etemadzadeh MH, Arashkia A, Roohvand F, Norouzfaz D, Azadmanesh K. Isolation, cloning, and expression of E. coli BirA gene for biotinylation applications. *Advanced biomedical research*. 2015;4:149.
15. Rahimi A, Arashkia A, Mirzaie A, Noorbazargan H, Sadat Shandiz SA, Rahimi R, et al. Optimization the expression of human papilloma virus E6 and E7 polytopic construct in E. coli expression system. *Tehran University Medical Journal*. 2015;73(9):624-31.
16. Sharifi H, Barzegar H, Langroudi L, Azadmanesh K, Arashkia A. Construction and evaluation of human papillomavirus genotype 18 pseudovirions. *Vaccine Research*. 2015;2(4):59-62.
17. Shakouri M, Moazzeni SM, Ghanei M, Arashkia A, Etemadzadeh MH, Azadmanesh K. A novel dendritic cell-targeted lentiviral vector, encoding Ag85A-ESAT6 fusion gene of *Mycobacterium tuberculosis*, could elicit potent cell-mediated immune responses in mice. *Molecular immunology*. 2016;75:101-11.
18. Shakouri M, Moazzeni SM, Ghanei M, Arashkia A, Etemadzadeh MH, Azadmanesh K. A novel dendritic cell-targeted lentiviral vector, encoding Ag85A-ESAT6 fusion gene of *Mycobacterium tuberculosis*, could elicit potent cell-mediated immune responses in mice. *Molecular immunology*. 2016;75(Supplement C):101-11.
19. Talebi S, Bolhassani A, Azad TM, Arashkia A, Modaresi MH. In vitro expression of HPV16 E7 linked to HMGB1 immunoadjuvant in mammalian cells. *Bratislavske lekarske listy*. 2016;117(10):609-13.
20. Abasi M, Kohram F, Fallah P, Arashkia A, Soleimani M, Zarghami N, et al. Differential Maturation of miR-17 ~ 92 Cluster Members in Human Cancer Cell Lines. *Applied biochemistry and biotechnology*. 2017;182(4):1540-7.

21. Afchangi A, Arashkia A, Shahosseini Z, Jalilvand S, Marashi SM, Roohvand F, et al. Immunization of Mice by Rotavirus NSP4-VP6 Fusion Protein Elicited Stronger Responses Compared to VP6 Alone. *Viral immunology*. 2017.
22. Khiavi FM, Arashkia A, Nasimi M, Mahdavi M, Golkar M, Roohvand F, et al. Immunization of mice by a multimeric L2-based linear epitope (17-36) from HPV type 16/18 induced cross reactive neutralizing antibodies. *Research in pharmaceutical sciences*. 2017;12(4):265-73.
23. Talebi S, Bolhassani A, Azad TM, Arashkia A, Modaresi MH. Immuno-Stimulating Peptide Derived from HMGB1 is More Effective Than the N-Terminal Domain of Gp96 as an Endogenous Adjuvant for Improvement of Protein Vaccines. *Protein and peptide letters*. 2017;24(3):190-6.

REFERENCES

1. Kayhan Azadmanesh, Head of Virology Research Group, Pasteur Institute of Iran, Tehran , Iran, azadmanesh@pasteur.ac.ir, Phone: 0098 21 64112251
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