

Curriculum Vitae

KIANA SHAHZAMANI

Ph.D of Medical Virology

I. PERSONAL INFORMATION

Name: Kiana Shahzamani
Date of Birth: 27/04/1975
Place of Birth: Esfahan, Iran
Marital status: Married, 1 child
Address: Dept of Biology, Faculty of Sciences, Lorestan University,
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II. EDUCATIONAL RECORDS:

Degree	Institution	Field	Date
High School Diploma	Salehat High School, High honored Diploma,	Natural Sciences	1993
B.Sc	University of Falavarjan,Esfahan	Medical Microbiology	1997
M.Sc	Tarbiat Modares University, Tehran	Medical Virology	2000
Ph.D	Tarbiat Modares Uuniversity,Tehran	Medical Virology	2001-2008

III. PROFESSIONAL AND ACADEMIC/SCIENTIFIC EXPERIENCES:

1993	Faculty member , Department of Microbiology, University of Falavarjan
2000-2001	Faculty member , Department of Microbiology and Virology, Medical University of Esfahan
2001-2002	Research consultant , Center for research of Infectious Disease, Amin Hospital, Esfahan
2002-present	Faculty member , Department of Biology, Lorestan University
2004-present	Research consultant , Digestive Disease Research Center, Shariati Hospital, Tehran University of Medical Sciences.
2012-2015	Manager , Lorestan Elite foundation

IV. MEMBERSHIP OF SCIENTIFIC SOCIETIES/BOARDS:

2000-present	Iranian Society for Virology
2002-present	International Society for Infectious Disease
2004-present	Iranian Society for Gastroenterology and Hepatology
2009-present	European Society for Clinical Microbiology and Infectious Disease (ECCMID)
2009-present	European Association for the Study of Liver (EASL)

V. TECHNICAL SKILLS:

- 1) Gene cloning and expression vector construct
- 2) Single and double digestion with restriction enzymes
- 3) Bacterial transformation methods
- 4) Mini and Maxi preparation of plasmids with or without commercial kits
- 5) Cell culture methods
- 6) Cellular transfection by Calcium phosphate
- 7) β -galactosidase assay using ONPG
- 8) Gel agarose electrophoresis and SDS-PAGE
- 9) Immunoblotting (EIA) and Western Blot
- 10) Dot blot and Southern blot
- 11) Primer / probe designing
- 12) Monocyte and lymphocyte isolation from whole blood by Ficol
- 13) Bacterial /Genomic/ Viral DNA and RNA extraction
- 14) PCR and RT-PCR techniques
- 15) Real-time RT-PCR with or without specific probes (SYBR Green, TaqMan, Hybprobe)
- 16) Standardization and validation of NAT assays especially in real-time PCR

VI. Work experience:

- 1) Cloning of VZV IE62 gene into a plasmid for substitution with HSV-1 IE175 gene in replication system (Chalberg' system).
- 2) Transfection of IE62 construct into cell culture (Vero, HeLa, and Huh7) and detection of functional characterization of it by β -Gal assay.
- 3) Study the expression of IE62 construct by Dot Immunoassay and Western blotting and development the Southern blot hybridization for detection of IE62 substitution.
- 4) Improving an RT-Nested-PCR method for detection of Hepatitis C Virus in plasma samples.
- 5) Development of a Real Time RT-PCR assay based SYBR Green for detection of Hepatitis C infected patients with low viral load.
- 6) Development of a Real Time RT-PCR assay based Hybridization probes (FRET) for Quantification and Genotyping of chronically HCV infected patients.
- 7) Isolation and purification of Cholesterol Oxidase gene from native Rhodococcus sp. 501 bacteria and its cloning into cloning and expression vectors

VII. ACCEPTED ARTICLES:

1. **Shahzamani K.**, Sabahi F., Merat S., Rezvan H., Samiee S., Karimi Arzanini M., Naghizadeh R. Development of a sensitive RT-Nested PCR method for detection of Hepatitis C virus, **Medical Journal of Modares; 2007, 10(2):35-41.**
- 2- Baesi K., Ravanshad M., Hosseini S.Y., Haji Abdolbaghi M., **Shahzamani K.** Phylogenetic analysis of HIV-1 pol gene (RT sequences) among Iranian HIV infected patients, **Blood; 2009,7(2): 94-100.**
3. **Shahzamani K.**, Merat S., Rezvan H., Samiee S., Khademi H., Malekzadeh R., Sabahi F. Development of a low-cost real-time RT-PCR technique for detection and quantification of hepatitis C viral load. **Clinical Chemistry and Laboratory Medicine (CCLM), 2010 Jun; 48(6):777-84.**
4. Ghanbari R., Ravanshad M., Hosseini S.Y., Yaghobi R., **Shahzamani K.** Genotyping and Infection-rate of GBV-C among Iranian chronic HCV infected patients .**Hepatitis Monthly, 2010;10(2):80-87.**
5. Ghanbari R., Ravanshad M., Hosseini S.Y., **Shahzamani K.** Detection of Hepatitis G virus (GBV-C), in chronic Hepatitis c Patient, by RT-Nested PCR. **Govaresh; Vol. 14, No.3, Autumn 2009; 153-160**
- 6- Lashkarian, H. E., Raheb, J., **Shahzamani, K.**, Shahbani, H., Shamsara, M and Hajipour, M.J, (2009). Isolation and identification of a native Rhodococcus strain Producing Cholesterol oxidase from soil .International Journal of Biotechnology and Biochemistry 2, 6, 203-215.
7. Jabbari H, Bayatian A, Sharifi AH, Zaer-Rezaee H, Fakharzadeh E, Asadi R, Zamini H, **Shahzamani K**, Merat S, Nassiri-Toosi M. Safety and efficacy of locally manufactured pegylated interferon in hepatitis C patients. **Arch Iran Med. 2010 Jul; 13(4):306-12.**
8. Lashkarian H E, Raheb J, **Shahzamani K**, Shahbani H, Bambai B, Sadeghizadeh M, Shamsara M. Isolation and identification of a native Rhodococcus strain Producing Cholesterol oxidase from soil. **Iranian Biomedical Journal.2010 January & April; 14 (1&2): 49-57.**
9. Yahoo N, Sabahi F , Shahzamani K, Malboobi MA,Jabbari H,Sharifi H, Mousavi fard SH, Merat S. Mutations in E2 and NS5A Regions in Infected Patients with Hepatitis C Virus Genotype 1a and Correlation with Combination Standard Therapy. **Journal of Medical Virology.83:1332–1337 (2011)**
10. Jabbari H , Zamani F, Hatami K, SheikholeslamiA, Fakharzadeh E, **Shahzamani K**, Zamini H, MeratS, Malekzadeh R, Sharfi A.H*. Pegaferon in hepatitis C: Results of a Multicenter Study. **Middle East Journal of Digestive Diseases/ Vol.3/ No.2/ September 2011.**
11. **Shahzamani K.**, Merat S., Rezvan H., Samiee S., Sadeghizadeh M., Karimi M., Naghizadeh R., Sabahi F. Rapid Low-Cost Detection of Hepatitis C virus RNA in HCV-infected patients by Real-Time RT-PCR using SYBR Green I. **Arch Iran Med. 2011 Nov;14(6):396-400 .**

12- Hamed Esmail Lashgarian ,**kiana shahzamani**, Jamshid Raheb. Isolation of native microorganisms producing cholesterol oxidase enzyme from soil, water, wastewater of leather and soap factories, and dairy products **Yafteh**, 2013, 15(1): 33-41.

13-Mousavi-Fard S.H, Merat S, **Shahzamani K**, Ghanbari R, Yahoo N, Sabahi F. Development of a SYBR Green real time multiplex RT-PCR technique for simultaneous detection of HCV and GBV-C Co-infection in plasma samples. **Molecular and Biochemical Diagnosis**, 2014, 1(1): 41-49.

14- Zohreh Heidari , **Kiana Shahzamani**, Reza Ghanbari , Arash Tahamsebifar. Association of SNPs in interferon receptor genes in chronic Hepatitis C with response to combined therapy of Interferon and Ribavirin. **Acta Medica Iranica**, 2014, 52(10):740-747.

15- Orian S, Nazari Saranjeh M, Bagherpour Zarchi M, Khodaghali F, Nabioni M, **Shahzamani K**. Effect of intraperitoneal injection of LPS (LPS) on the process of apoptosis, Alzheimer's and memory formation in the hippocampus of male Wistar rats in a time-dependent manner. **Journal of Esfahan Medical School**, 2014, 32(285): 1-9.

16- Khorrami S, Mohammadpour H, **Shahzamani K**, Zarif MN, Sharifi AH, Merat S, Poustchi H. The relationship between HLA-G and viral loads in non-responder HCV-infected patients after combined therapy with IFN- α 2 α and Ribavirin. **Human Immunology**, 2014, 12(12): Epub.

17- Sabzali S, Bakhtiyari S, Karimeh Haghani, Arman Rostamzad, Kiana Shahzamani. The effects of the hydroalcoholic extract of *Thymbra spicata* on some gram positive and gram negative pathogenic bacteria. **Yafteh**, 2014, 16(2): 91-98.

18- Orian S, Bagherpour Zarchi M, Nabioni M, Nazari Saranjeh M, Bagherpour Zarchi A, **Shahzamani K**. Utilization of a new method for the treatment of Alzheimer's disease in male Wistar rats induced by streptozotocin in reducing complications associated with HCT. **Yafteh**, 2015, 17(2): 105-112.

19- **Shahzamani K**, Esmail Lashgarian H, Mokhaieri H, Papi OA. Quantification of hepatitis C viral load using an In-House Real-Time PCR assay in HCV infected patients in Khorramabad city. (Accepted for publishing in **Yafteh**).

VIII. ARTICLES UNDER REVIEW

1. Amini Kaderijani, **Shahzamani K**, Ghanbari R. Does GBV-C have a role to play in HCV co-infection? (Under review in **Hepatology Research**).

2- **Shahzamani K**, Esmail Lashgarian, Khanizadeh S. Therapeutic Vaccines of Hepatitis C virus with emphasis on DNA Vaccine. (Under Review in Arak University of Medical Sciences).

IX. LIST OF PAPERS PRESENTED IN CONGRESSES AND SEMINARS:

1- Shahzamani K., Sadeghizadeh M., Sabahi F. Substitution of Varicella-Zoster Virus immediate early 62 construct for the Herpes Simplex Virus immediate early 175 gene in Chalberg system. Presented in Ninth Iranian Biology Conference, 2000, Tehran, Iran.

2- Shahzamani K., Sadeghizadeh M., Sabahi F. Functional Characterization of Varicella-ZosterVirus Immadiate Early 62 Protein in a Herpes Simplex Virus Transient Origin-dependent Replication assay. Presented in Iranian Congress of Virology, 2001, Tehran, Iran.

3- Shahzamani K., Esmail Lashkarian H., Sabahi F., Abdi J. Prevalence of Hepatitis C virus in Blood Donors Referred to Lorestan Blood Transfusion Organization. Presented in Iranian Congress of Virology, 2006, Tehran, Iran

4- Hashempour, T., Sabahi, F., Amini, S., Karimi, M., Merat, S., Behzadian, F., Radmard, A., Shahzamani K. Interferon Resistance of Hepatitis C Virus Genotypes 1a/1b: Relationship to Nonstructural 5A Gene Quasispecies Mutations. Presented in Iranian Congress of Virology, 2006, Tehran, Iran.

5- Shahzamani K., Sabahi F., Merat S. Quantification of Hepatitis C virus in Human Plasma Samples by using Real-Time Reverse Transcriptase PCR. Presented in ECCMID, 2006. Nice, France.

6- Shahzamani K., Merat S., Rezvan H., Samiee S., Naghizadeh R, Sabahi F. Development of a Real-time RT-PCR Assay for Quantitation of Hepatitis C virus RNA in Chronically HCV- infected patients. Presented in Iranian Congress of Virology, 2007, Tehran, Iran.

7- Shahzamani K., Merat S., Sotoudeh M., Sadeghizadeh M., Sabahi F. Quantification of Hepatitis C virus RNA using Real-Time RT-PCR and fluorimetry. Presented in 1st Iranian Congress of Clinical Microbiology 2007, Shiraz, Iran.

8- Shahzamani K., Esmail Lashkarian H., Sabahi F., Abdi J., Sadeghi-zadeh M., Moazami Goodarzi H.R. Improving a sensitive and specific RT-PCR method for detection of HCV RNA in First-time blood donors. Presented in 1st International Transfusion Medicine Congress 2007, Tehran, Iran.

9- Shahzamani K., Merat S., Rezvan H., Samiee S., Naghizadeh R., Sabahi F. Development of a Low Cost approach for Simultaneous Quantitation and Genotyping of Hepatitis C virus by Real-time RT-PCR. Presented in American Society for Virology 2007, Oregon, USA.

10- Ghanbari R., Ravanshad M., Hosseini S.Y., Shazamani K., Sabahi F., Samadi M. High prevalence of GBV-C infection amonh patients with hepatitis C virus in Iran. Presented in 5th National Biotechnology Congress of Iran 2007. Tehran, Iran.

11- Khanlari Z., Hosseini S.Y., Ravanshad M., Ghanbari R., Sabahi F., Baesi K., Shahzamani K., Saberi firoozi N., Yaghoubi R., Mehrabani D., Detection of HCV/HGV by using a sensitive Multiplex –Nested-PCR. Presented in 5th National Biotechnology Congress of Iran 2007. Tehran, Iran.

12- Merat S., Jabbari H., Sharifi A. H., Zaer-Rezaee H., Fakharzadeh E., Asadi R., Shahzamani K. Mohammadi M., Malekzadeh R. The effect of adding Metformin to the treatment of hepatitis C: A preliminary report of a randomized controlled trial. Presented in European Association for the Study of Liver Disease, 2008, Milan, Italy.

13- Shahzamani K., Sabahi F., Merat S., Rezvan H., Mirab-Samiee S., Naghizadeh R., Khademi H., Malekzadeh R. Development of a low-cost approach for quantification and genotyping of hepatitis C virus. Presented in ECCMID, 2009. Helsinki, Finland.

14- Shahzamani K., Sabahi F., Merat S. Clinical Evaluation of response to therapy in Chronically HCV infected patients using real-time RT-PCR technique. Presented in EACID, 2009. Baku, Azerbaijan.

15- Mosavi fard S.H., *Shahzamani K., Merat S., Sabahi F. Development of a SYBR Green Real time multiplex RT-PCR technique for simultaneous detection of HCV and GBV-C Co-infection in plasma samples. Presented in IAGH 2011, Tabriz, Iran.

16- Hamed Esmail Lashgarian, Kiana Shahzamani, Toomaj Saboteh. Report several cases Legionellosis in bronchoalveolar specimens of patients attending health centers in Isfahan city. Presented in 6th Iranian Congress of Clinical Microbiology and 1st International Congress of Clinical Microbiology 1391, Mashhad, Iran.

17- Khodakarami Fard Zahra, Esmail Lashgarian Hamed, **Shahzamani Kiana,** Bazvand Mohammad, Khodakarami Fard Ali. Determine the origin of the dust of the West and South West Medici using Landsat satellite imagery MODIS and ARC GIS, Presented in The first International Conference on Dust Haze, management of Factors and Consequences 1392, Khoram abad, Iran.

18- Shahzamani K. Association of SNPs in interferon receptor genes in chronic Hepatitis C with response to combination therapy. Presented in OMICS 2014, Baltimore, USA.

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X. RESEARCH STUDENTS CO-SUPERVISED:

M.Sc:

- | | |
|-----------------------------------|--------------------------------------|
| 1) Mojgan Deldari (2001- 2003) | 8) Maryam Abolfathi (2010 – 2012) |
| 2) Taiebeh Hashempour (2003-2005) | 9) Nasrin Feili (2010 – 2012) |
| 3) Reza Ghanbari (2005-2007) | 10) Somaie Sabzali (2011- 2013) |
| 4) Neda Yahoo (2006- 2008) | 11) Mennat pour Reza (2013- present) |
| 5) Saeed Moosavi (2006-2008) | |
| 6) Azadeh Amini (2009-2010) | |
| 7) Zohreh Heidari (2009-2010) | |

Md.

- 1) Saeed Esmaili (2006-2008)

PhD:

- 1) Hamed Esmail Lashkarian (2006-2010)
- 2) Samaneh Khorrami (2010- present)

XI. COURSES TAUGHT:

- 1) Microbiology techniques for B.Sc students
- 2) Virology course for B.Sc/Msc students
- 3) Cell culture techniques for M.Sc students
- 4) Molecular biology course for M.Sc students
- 5) Immunology course for M.Sc students
- 6) Molecular biology techniques for M.Sc and Ph.D students
- 7) Evolution course M.Sc students.

XII. RESEARCH PROJECTS:

1. Development of a SYBR Green real time multiplex RT-PCR technique for simultaneous detection of HCV/GBV-C in HCV and HIV/HCV positive plasma samples and examination and comparison of hepatitis C related liver disease between these patients (In process)
2. Study the prevalence of occult HBV in chronic HCV-infected patients and evaluation the effects of this infection on liver histology and response to antiviral therapy of chronic hepatitis C . (In process)
3. Development of An in-house real-time RT-PCR method for for detection and quantification of Hepatitis Delta virus in HBV-infected patients receiving therapy (Finished).
4. Study of Genetic polymorphisms of interferon receptor genes (IFNAR1 and IFNAR2) in HCV infected patients and its association with combined therapy (Finished).

XIII. COLLABORATING IN RESEARCH PROJECTS:

- 1) Measuring MxA expression level in PBMCs for monitoring bioactivity of pegylated- $\text{INF}\alpha 2\text{a}$ and as a predictive marker of SVR (sustained virologic response) in HCV patients by Real Time RT-PCR
- 2) Determination of relationship between hepatitis C nonstructural protein 5A gene mutations and interferon resistance in hepatitis C virus infection in Iranian population.
- 3) Simultaneous Detection of HGV and HCV by Real-time RT-PCR based SYBR Green in co-infected patient.

XIV. REGISTRATION IN GENE BANK

1. [Rhodococcus sp. 501 partial 16S rRNA gene, strain 501](#) 947 bp linear genomic, FN298676.2, GI:226489016
2. [Rhodococcus sp. 501 partial cho gene for cholesterol oxidase, strain 501](#) 1,600 bp linear genomic, FN421337.1, GI: 251821392
3. [Rhodococcus sp. 502 partial 16S rRNA gene, strain 502](#) 1,407 bp linear genomic. FN430570.1, GI: 254265615
- 4- [Hepatitis C virus subtype 1a isolate 390 NS5A gene, partial cds](#) 228 bp linear RNA, Accession: JN418756.1, GI: 354469042
- 5- [Hepatitis C virus subtype 1a isolate 692 NS5A gene, partial cds](#) 234 bp linear RNA Accession: JN418754.1, GI: 354469038
- 6- [Hepatitis C virus subtype 1a isolate 725 NS5A gene, partial cds](#) 234 bp linear RNA Accession: JN418752.1, GI: 354469034
- 7- [Hepatitis C virus subtype 1a isolate 583 NS5A gene, partial cds](#) 234 bp linear RNA Accession: JN418750.1, GI: 354469030

- 8- [Hepatitis C virus subtype 1a isolate 547 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418748.1, GI: 354469026
- 9- [Hepatitis C virus subtype 1a isolate 355 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418746.1, GI: 354469022
- 10- [Hepatitis C virus subtype 1a isolate 413 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418744.1, GI: 354469018
- 11- [Hepatitis C virus subtype 1a isolate 545 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418742.1, GI: 354469014
- 12- [Hepatitis C virus subtype 1a isolate 650 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418740.1, GI: 354469010
- 13- [Hepatitis C virus subtype 1a isolate 377 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418757.1, GI: 354469044
- 14- [Hepatitis C virus subtype 1a isolate 724 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418755.1, GI: 354469040
- 15- [Hepatitis C virus subtype 1a isolate 678 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418753.1, GI: 354469036
- 16- [Hepatitis C virus subtype 1a isolate 759 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418751.1, GI: 354469032
- 17- [Hepatitis C virus subtype 1a isolate 742 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418749.1, GI: 354469028
- 18- [Hepatitis C virus subtype 1a isolate 551 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418747.1, GI: 354469024
- 19- [Hepatitis C virus subtype 1a isolate 362 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418745.1, GI: 354469020
- 20- [Hepatitis C virus subtype 1a isolate 663 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418743.1, GI: 354469016
- 21- [Hepatitis C virus subtype 1a isolate 659 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418741.1, GI: 354469012
- 22- [Hepatitis C virus subtype 1a isolate 552 NS5A gene, partial cds](#) 234 bp linear RNA
Accession: JN418739.1, GI: 354469008
- 23- [Laudakia sp. AN-L1091 12S ribosomal RNA gene, partial sequence; mitochondrial](#)
386 bp linear DNA Accession: JN654461.1 GI: 374096355
- 24- [Bufo viridis isolate 1M-L1091 12S ribosomal RNA gene, partial sequence; mitochondrial](#)
408 bp linear DNA Accession: JN654460.1 GI: 374096354

XV. NAMES AND ADDRESSES OF SEVERAL REFEREES:

Dr. Farzaneh Sabahi: Dept of Virology, Tarbiat Modares University. Email: sabahi_f@modares.ac.ir ; Phone: +98-9123204399

Dr. Shahin Merat: Digestive Disease Research Center, Medical Sciences of Tehran University. Email: merat@ams.ac.ir ; Phone: +98-9171173966

Dr. Siamak Samiee: Food and Control Research Laboratories. Email: siamak_samiee@yahoo.com ; Phone: +98-9123589212