

CURRICULUM VITAE



Arshad Hosseini

Birthday : ۲۵, ۱۰, ۱۹۶۳

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POSITION HELD

Assistant Professor, Department of Medical Biotechnology, Faculty of Allied Medicine, Iran University of Medical Sciences, Tehran, Iran

EDUCATION

۲۰۰۴-۲۰۰۸, Ph.D of Biotechnology (molecular genetics) , University of Pune, Pune, India

۱۹۹۰- ۱۹۹۳, B.Sc, Shahid Beheshti University, Tehran, Iran

۱۹۹۴- ۱۹۹۷, M.Sc, Tehran University of Medical Sciences, Tehran, Iran

Teaching Experience / Academic Activities:

- Kurdistan University of Medical Science, ۱۱ years teaching in different courses
- Azad University, Sanandaj, ۷ years teaching in different courses
- Kurdistan University, ۴ years teaching in different courses
- Tehran University of Medical Science

Areas of teaching:

Biotechnology, Molecular Biology, Bioinformatics, Pathobiology, water and waste water microbiology, medical parasitology and Protozoology.

KEY QUALIFICATIONS

Skills

Wet lab and inselico experiences on:

- solution preparation
- microscopy and standard biochemical characterization methods
- Whole genome sequencing
- Exome sequencing
- Isolation of genomic and plasmid DNA
- DNA Construction of plasmid and genomic library
- Shotgun cloning and sequencing
- Assembly and Annotations of the sequence
- Analysis of sequence
- real time PCR
- Proteomics
- NGS data analysis
- Cancer biomarker study
- Proficient in DNA, RNA and Protein Purification and Characterization
- Drug resistance Studies
- Familiarity with cell culture, cultivating, monitoring
- Good Team Player with exemplary analytical and problem solving skills
- Lab experience in Cell culture techniques: Maintenance of cell lines and adherent cell lines, sterile practice, Care and use of Cell culture equipments
- Restriction digestion of DNA
- primer designing, PCR
- DNA transformation (transfection of cells with plasmid DNA)
- blue - white screening and southern blotting

Scientific Softwares Skills in:

- Gene Structure Prediction
- Functional motif searching
- Sequence retrieval
- Multiple sequence alignment
- Similarity Searching
- Gene Structure Prediction Tools
- [VD gel analysis](#)
- Secondary and tertiary structure prediction
- DNA analysis including translation
- Primer designing

- ORF analysis
- Phylogenetic analysis
- Protein analysis
- Sequence assembly
- Location of expression

General Softwares

Experience in Windows, MS-Office, MS-Word, MS-Excel, MS-PowerPoint, MS-Office, MS-Windows, [Endnote](#)

FIELDS OF INTEREST

Medical Biotechnology and Molecular Biology (Genetic engineering, Genetic of microorganisms, cancer biomarkers, MiroRNA, NanoBiotechnology, PCR and Real time PCR, peptid synthesis , Bioinformatics (Genomics, transcriptomics) genomic analysis

PUBLICATIONS

BOOKS

1. Current Buffer's and Solution's in Medical Biotechnology Mohammad Reza Fayazi Dr. Arshas Hosseini
2. Current Terminology in Medical Biotechnology Mohammad Reza Fayazi Dr. Arshas Hosseini

Research articles

published papers entitled

1. Distribution of the mutated delta Δ allele of CCR Δ co-receptor gene in Iranian population , Medical Journal of The Islamic Republic of Iran (MJIRI), Vol. 28, 140. 29 November 2014
2. SIMPLE SEQUENCE REPEATS IN SPECIFIC GENE GROUPS OF SHIGELLA GENOME, journal of IIOABJ; Vol. 4; Issue 1; 2013:17-24
3. Characterization of *Shigella flexneri* isolates by Tandem Repeat Analysis and Pulsed-Field Gel Electrophoresis, journal of IPCBEE, 2012
4. Cloning, soluble expression and immunoreactivity of HIV-1 CRF Δ _{AD} p24 protein in fusion with HP-thioredoxin from Iranian clinical

isolates, journal of Lab Medicine ۲۰۱۲ | Volume ۴۳, Number ۶

۶. Simple sequence repeats in different genome sequences of *Shigella* and comparison with high GC and AT- rich genomes, journal of DNA sequence Volume ۱۹, Issue ۳ June ۲۰۰۸, pages ۱۶۷ - ۱۷۶.

۷. Fuzzy Expert System for Fluid Management in General Anesthesia, Journal of Clinical and Diagnostic Research. ۲۰۰۷Aug; (۴) ۲۵۷-۲۶۷

۸. Co-inheritance of a-and b-thalassemia in Khuzestan Province, Iran, Hematology HEM ۰۷۸۱, ۳d ۱۹/۳/۰۸ ۱۰:۰۳:۴۳

۹. Study of contamination prevalence of strawberries with ova of human bowel parasites, scientific journal of Kurdistan University of medical sciences, Spring ۱۹۹۹, Vol ۳, No ۳.

۱۰. DISTRIBUTION AND COMPARISON OF ANTIBIOTIC RESISTANCE PATHOGENICITY ISLANDS AMONG UPEC AND DEC in International Journal of Advances in Science Engineering and Technology, ISSN: ۲۳۲۱-۹۰۰۹ Volume- ۳, Issue- ۴, Oct.- ۲۰۱۵

۱۱. Pathotypic and Phylogenetic Study of Diarrheagenic *Escherichia coli* and Uropathogenic *E. coli* Using Multiplex Polymerase Chain Reaction in Jundishapur J Microbiol. ۲۰۱۶ February; ۹(۲)

۱۲. Acceptance for publish paper entitled "Optimization of HIV-1 recombinant protease (rPR) expression, solubility and purification problems by TOPO-Cloning in *E.Coli* BL21" in New Cellular and Molecular Biotechnology Journal

۱۳. Acceptance for publish paper entitled "Analysis of potential associations of two common polymorphisms in the ABCC1 3'UTR with breast cancer susceptibility"

Abstracts

National/International Symposia/Workshops:

۱. Poster Presentations in third congress of parasitology, March ۲۰۰۰, Sari, Iran on Epidemiological and sero epidemiological study of hydatidosis and echinococcosis in some regions of Kurdistan, Iran.

۲. Poster Presentations in third congress of parasitology, March ۲۰۰۰, Sari, Iran on Study of contamination prevalence of strawberries with ova of human bowel parasites.

۳. Poster presentation in the International symposium on frontiers in Genetics and Bioinformatics-Retrospect and Prospect organized by department of Genetics, Osmania University, Hyderabad, ۸-۱۰ January, ۲۰۰۵, on

“Abundance, distribution and composition of simple sequence repeats in the genomes of *Shigella* strains”.

ξ. Poster presentation in the International symposium on frontiers in Genetics and Bioinformatics-Retrospect and Prospect organized by department of Genetics, Osmania University, Hyderabad, 8-10 January, 2005, on “Nucleotide Sequence Analysis of *Shigella Flexneri* 1a”.

ο. Oral Presentation in fourth Annual seminar of Iranian students in India in Information technology, Bangalore, March 2005, on “Application of Information Technology in Bioinformatics and life sciences”.

ϒ. Oral Presentation in International scientific experience (ISE) (IRAN, INDIA), January 20th, 2006, Pune India, on “Perspectives of Genome researches”.

ϒ. Oral Presentation in Seventh Academic Seminar of Iranian students, February 2008, Science, Art, Humanities, Mysore, India on “SSR in different genome sequences of *Shigella*”.

λ. Poster presentation in 5th Iranian Congress of Epidemiology, October 2008, Kurdistan University of Medical Science, Iran, on "Constipation prevalence in Kurdistan of Iran".

ϑ. Poster presentation in 5th Iranian Congress of Epidemiology, October 2008, Kurdistan University of Medical Science, Iran, on "Study of dyspepsia Prevalence and some related factors in Kurdistan of Iran".

10. Acceptance for oral presentation of paper entitled” Distribution and Frequency of β –Thalassemia mutations in various parts of IRAN “in 9th Iranian Genetics Congress, May 2006.

11. Oral Presentation in the 2nd International student conference of Biotechnology, 10-17 November 2008, on "Study on SSR in Clusters of Orthologous Groups of proteins (COGs) in *Shigella flexneri* genome".

12. Oral Presentation in the first seminar on Biology and Biotechnology, 2-3 March 2008, in Kurdistan, on "Mini review on Biotechnology in Developing Countries: Status of I.R.Iran and India.

13. Poster presentation in the Sixth European Meeting on Molecular Diagnostics, October 22nd&23rd 2009, the Netherlands on “ Molecular Typing of *Shigella flexneri* Based on VNTR”

14. Oral Presentation in the Shijiazhuang International Life Science & Pharmaceutical Forum 2011, 23-25 May, China on “Variable number of tandem repeats and pulsed-field gel electrophoresis cluster analysis of *Shigella flexneri*” and “Simple sequence repeats in Plasmids and pathogenesis islands of *Shigella* species”

15. Oral Presentation in the 4th International Congress of Molecular Medicine, 27-30 June, 2011, Istanbul, Turkey, on “Frequency, structure and

function of *Shigella* and *E. coli* Pathogenesis Islands” and ”*Shigella* antibiotic resistance pattern and its relationship with *Shigella* resistance locus on”

۱۶. Invited Speaker in ۲nd MBA Biotechnology Congress ۹-۱۰ December, ۲۰۱۲ on “Role Of Bioinformatics in the medical biotechnology development.
۱۷. Poster presentation in the ۱st Congress on Novel & Innovative laboratory Techniques ۲-۴ Oct ۲۰۱۳ Tehran, Iran on” Mitochondrial Haplotypes and their Impact on Coronary Artery Disease”.
۱۸. Poster presentation in the ۱st Congress on Novel & Innovative laboratory Techniques ۲-۴ Oct ۲۰۱۳ Tehran, Iran on” Mitochondrial haplotypes and their impact on breast cancer”
۱۹. Oral Presentation in the ۴th International Conference Of ISERD ۶th of June ۲۰۱۶, Istanbul on “Distribution and comparison of antibiotic resistance Pathogenicity Islands among UPEC and DEC”
۲۰. Oral Presentation in the ۴th International Conference Of ISERD ۶th of June ۲۰۱۶, Istanbul on “Cloning and soluble expression of Hiv-۱ Crf^{۳۰} protease in fusion with thioredoxin from an Iranian Clinical isolate”
۲۱. Attended in second congress of parasitology, December ۱۹۹۷, Tehran, Iran
۲۲. Attended national Workshop ۱۴-۳۰ Des, ۲۰۰۴, on “New Trend in Biotechnology and Bioinformatics” department of Biotechnology and Bioinformatics Center, University of Pune.
۲۳. Attended workshop on “Bioinformatics analysis using Accelrys GCG and seqLab, university of Pune, ۱۳-۱۴ December ۲۰۰۶”.
۲۴. Attended Workshop on Knowledge Discovery in Life Sciences: Tools & Techniques in Bioinformatics January ۲۹-February ۲, ۲۰۰۷.
۲۵. Attended Workshop on GCG package at Bioinformatics centre from ۱۳th to ۱۴th of December.

RESEARCH GRANTS

۱. Tehran University of Medical Sciences, Epidemiological and sero epidemiological study of hydatidosis and echinococcosis in some regions of Kurdistan, Iran.
۲. Kurdistan University of Medical Science, Study of contamination prevalence of strawberries with ova of human bowel parasites.
۳. Kurdistan University of Medical Science, Survey of cryptosporidiosis

and other gastrointestinal parasites in children in Sanandaj, Kurdistan, Iran.

ξ. Kurdistan University of Medical Science, A comparative study on obies balsam of Kurdistan (Anacardiaceae) and Canada balsam for mounting microscopy slides.

ο. Kurdistan University of Medical Science, water examination with one method of filtration for detection cyst and oocyst of protozoa and ova parasite.

7. Kurdistan University of Medical Science, Study of intestinal parasite prevalence in Kurdistan of Iran.

∕. Study on *Shigella* antibiotic resistance patterns and its relationship with SRL PAI (*Shigella* resistance locus on Pathogenicity Island) in dysenteric cases.

∕. Comparision study of ∕ virulence genes in *Escherichia coli* strains isolated from urinary tract infection cases (children below ∕ years, pregnant ladies and old patient ο, -∕, years) by multiplex PCR.

9. Effects of probiotic and prebiotic composition on standard regimens for *H. pylori* eradication.

∕. pathogenecity islands of *Shigella* and *E. coli*: frequency, structure and function

∕∕. Study of Biozyme Cleanse Powder for the treatment of chronic constipation

∕∕. Molecular detection of DEC and UPEC by mPCR

∕∕. Distribution and comparison of antibiotic resistance Pathogenicity Islands among UPEC and DEC

∕ξ. Isolation and cloning of HIV CRF₀₃₀ protease gene into the Pet∕∕D.TOPO vector in *E.coli* BL∕∕

∕ο. Evaluation of trastuzumab-resistance in Breast Cancer Patients and role of mutation and overexpression of biomarkers

∕∕. mRNA and Protein Expression of Breast Cancer's Classifier Biomarkers and their Relationship with Clinicopathological Status and Treatment Outcome in Iran

17. mir-200 family and ABCC1 expression analysis in drug resistant of Breast Cancer Cell Lines

18. mir-200 family and ABCC1 expression analysis in drug resistance of Breast Cancer

19. Isolation, cloning of HIV CRF030 protease gene and its expression in pCDNA3.1 expression vector in HEK293 cell line for use as protease inhibitor screening model

20. Mir-141, EGFR, EGF and MAPK expression analysis in MCF7 Breast Cancer Cell Line

21. Determining genetic alterations in CID(Combined Immuno Deficiency) patients utilizing whole exome sequencing technique

22. Study of genetic variation in patients with primary immunodeficiencies by means of whole exome sequencing