

CURRICULUM VIATE



Dr. Meraj Pourhossein

Associate Professor in school of Nutrition & Food sciences, Department of food science and technology, Isfahan University of Medical Sciences, Isfahan, Iran.

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EDUCATION:

- 1999-2003 PhD. Molecular Biology & Biotechnology, Univ. of Manchester (UK)
1998-1999 MSc. Molecular Biology, Univ. of Manchester (UK)
1989-1992 MSc. Microbiology, University of Tehran (Iran)
1985-1989 BSc. Microbiology, University of Isfahan (Iran)

EMPLOYMENT:

- 2013- 2016 Lecturer in Molecular Biology, Molecular Nutrition & Food science related courses, Department of Nutritional Sciences, School of Nutrition, Isfahan University of Medical Sciences
2010- 2013 Lecturer in Molecular Biology & Biotechnology, Department of Genetics and Molecular Biology, Medical School, Isfahan University of Medical Sciences, Isfahan, Iran
2008- 2010 Visiting Scientist, Faculty of life sciences, Manchester University.
2004- 2008 Lecturer in Molecular Biology & Biotechnology, Dep. of Genetics and Molecular Biology, Isfahan University of Medical Sciences, Iran
2003-2004 Project assistant in the University of Manchester
2000-2003 Demonstrator in MCC for IT skills in the Univ. of Manchester
1992-1998 Lecturer in Microbiology and Electron Microscopy, School of Medicine, Dept. of Anatomy, Isfahan, Iran

AND PROFESSIONAL INTERESTS:

I am interested in Molecular biology related techniques. I have experience in the following techniques: *In silico* analysis, homology studies, Electron Microscopy (SEM and TEM), Atomic Force Microscopy (AFM), DNA purification from Animal and bacterial cells, preparation of plasmid DNA , PCR based techniques, Using Restriction Endonucleases for Partial & Multiple Digestions of DNA, ligation and cloning techniques, transformation of plasmid DNA into cells, screening of recombinant DNA, DNA sequencing, Western blotting, Coomassie blue and Silver staining, complementation assays, protein purification, production of polyclonal antibodies, large scale protein production for crystallographic analysis, site directed mutagenesis, hybridization studies, phage sensitivity analysis, radioactive incorporation and autoradiography.

AWARDS:

- 2010 Advanced technologies (AFM), January- March 2010, University of Manchester
- 2002 Travel grant from SGM (to present my paper in Xth International Congress of Applied Microbiology Paris, 27th July to 1st August 2002)
- 2000 Graduate Student Symposium (GSS 2000), University of Manchester, UK

PUBLICATIONS

1. Rouigari, M., Dehbashi, M., Ghaedi, K., Pourhossein, M. Targetome analysis revealed involvement of MIR-126 in neurotrophin signaling pathway: A possible role in prevention of glioma development. *Cell Journal.* 20(2):150-156 (2018)
2. Korbekandi H, Mohseni S, Mardani Jouneghani R, Pourhossein M, Iravani S. Biosynthesis of silver nanoparticles using *Saccharomyces cerevisiae*. *Artif Cells Nanomed Biotechnol.* 2016;44(1):235-9.
3. Sehhati MR., Mehri AR., Rabbani H., Pourhossein M., Stable Gene Signature Selection for Prediction of Breast Cancer Recurrence Using Joint Mutual Information. *IEEE/ACM Trans. Comput. Biology Bioinform.* 12(6): 440-1448 (2015)
4. Korbekandi H., Jouneghani RM., Mohseni S., Pourhossein M., Iravani S., Synthesis of silver nanoparticles using biotransformations by *Saccharomyces boulardii*. *GREEN PROCESSING AND SYNTHESIS.* Volume: 3, Issue: 4 Pages: 271-277 (2014)
5. Ghavimi R, Pourhossein M, Ghaedi K, Alesahebfosoul F, Honardoost MA, Maracy MR. Genetic association of rs1520333 G/A polymorphism in the IL7 gene with multiple sclerosis susceptibility in Isfahan population. *Adv Biomed Res.* 2014 Nov 29;3:238.
6. Pourhossein M, Ghavimi R, Alesahebfosoul F, Ghaedi K. Association between rs1800795 (-174 G/C) Polymorphism in the Promoter of IL6 Gene and Risk of Relapsing-Remitting Multiple Sclerosis (RRMS) in Isfahan Population. *Open Journal of Genetics,* Vol.4 No.5, 407-413.
7. Ghavimi, R., Pourhossein, M., Limitations of clinical application of siRNA delivery based on non-viral vectors (Review). *Journal of Isfahan Medical School,* Volume 32, Issue 272, 2014, Pages 34-48
8. Pourhossein M, Korbekandi H. Cloning, expression, purification and characterisation of *Erwinia carotovora* L-asparaginase in *Escherichia coli*. *Adv Biomed Res* 2014;3:82.

9. Kheradmand E, Pourhossein M, Amini G, Saadatnia M. Factor V Leiden does not have a role in cryptogenic ischemic stroke among Iranian young adults. Advanced Biomedical Research, 2014;3: 80
10. Tajadini, Mohammad Hassan; Khadem, Houra; Pourhosein, Meraj; Sabzghabaei, Ali Mohammad; Hemati, Simin; Sadeghi, Hamid Mirmohammad. Investigating the Prevalence of BRCA1 and BRCA2 Gene Mutations in Patients with Breast Cancer. J Isfahan Med Sci 2013; 30 (218): 2217-2224.
11. Pourhossein M, Mirzapour H. Optogenetics: Method of the Year 2010, Strategy, application and its future directions towards clinical application. J Isfahan Med Sci 2013; 30(215): 2072-83
12. Gheissari A, Attarzadeh H, Sharif H, Pourhossein M and Merrikhi A. Steroid Dependent and Independent Ocular Findings in Iranian Children with Nephrotic Syndrome. Int J Prev Med. 2011; 2(4): 264–268.
13. Korbekandi H, Darkhal P, Hojjati Z, Abedi D, Hamed J and Pourhossein M. Overproduction of clavulanic acid by UV mutagenesis of *Streptomyces clavuligerus*, , Iranian Journal of Pharmaceutical Research.2010; 9(2): 177-181
14. Thompson J, Pourhossein M, Goldrick M, Hudson T, Derrick J and Roberts I. K5 heparan lyase combines features of viral tail spike hydrolases and bacterial polysaccharide lyases.. J Biol Chem. 2010 Jul 30; 285(31):23963-9.
15. Pishva E, Hassannia N, Fazeli MR, Havaee A, Jamalifar H, Mearaj Pourhossein, Shojaee H and Akbari M. Antibacterial effect of Authochlorous Lactobacillus strains isolated from traditional yogurts. Pakistan Journal of Nutrition 8 (8): 1132-1137, 2009
16. Abedi D, Korbekandi H, Pourhossein M, Motovali-Bashi M, Hejazi M, Narimousaei M and Kabiri M. Optimisation of *Candida rugosa* Lipase Esterase Activity, Biotechnology, 2008, Vol: 7, Issue: 1, P: 112-117
17. Pourhossein M., Roberts I.S., Expression of E.coli capsular polysaccharide requires the KfiB protein:A Structural based analysis, Iranian Journal of Biomedical Sciences 10(8): 124-132,2008
18. Malekshahi R, Mehri D.A, Beigi M, Poorhosein M. Gene finding using HMM in prokaryotic genomes, Modern Genetics. 2007; 2(1); 47-54.
19. Hodson N, Griffiths G, Cook N, Pourhossein M, Gottfridson E, Lind T, Lidholt K, Roberts IS. Identification that KfiA , a protein Essential for the Biosynthesis of the E.coli K5 capsular polysaccharide, is an α -UDP-GlcNAc Glycosyltransferase, J Biol Chem. 2000 1;275(35):27311-5.
20. Fazeli A, Pourhossein M. Inhibitory effect of *Pseudomonas aeruginosa* isolated from oral cavity on Methicillin Resistant Staphylococcus Aureus (MERSA) strains, Journal of Isfahan Medical School, 1996. No. 45, pp. 22-30

CONFERENCE PRESENTATIONS

1. Functional & computer-aided analysis of the KfiB (*E. coli*) and its homologous HyaE (*P. multocida*), 8 - 11 September 2008, Dublin, Ireland
2. The cell surface expression of group 2 capsular polysaccharides in *Escherichia coli*: A function and computer-aided analysis of KfiB protein. ASM Conference on Emerging Technologies of Medical Importance, April 6 - 10, 2008, Beijing, China
3. 1st International Congress on Health Genomics and Biotechnology, 24-26 November 2007 Tehran Iran
4. The effect of tunicamycin on incorporation of GlcNAc into membrane lipids catalysed by KfiB: *in vitro* & *in vivo* analysis.SGM meeting, 11 - 14 September 2006, York, UK
5. The role of the DAD motif in the membrane association of KfiB protein & incorporation of GlcNAc into membrane, 157th Meeting of SGM, 12-14 September 2005 Keele University , Keele, UK
6. Expression of *E.coli* capsular polysaccharide requires the KfiB protein: A structure function analaysis, Biology in Asia International Conference, 7-10 December 2004, Singapore
7. The role of the KfiB protein in the expression of E.coli K5 capsule, 153rd Meeting of SGM, 8-11 September 2003 University of UMIST , Manchester , UK
8. The localization of KfiA, B, and C proteins involved in the biosynthesis of the E.coli K5 polysaccharide,103rd General Meeting , Washington, D.C., 18-22 May 2003.
9. Molecular studies on the expression of E.Coli K5 capsule, Xth International Congress of the Bacteriology & applied Microbiology, Paris, 27July-August 2002