Curriculum vitae

Dr. Salar Bakhtiyari, PhD

Assistant Professor

Department of Clinical Biochemistry

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Personal Information:

Gender: Male **Date of Birth:** Jan. 17th, 1980

Marital Status: Married **Nationality:** Iranian

Educational Records:

1. PhD, 2010, Clinical Biochemistry, Tarbiat Modares University, Tehran, Iran.
2. MSc, 2004, Clinical Biochemistry, Tarbiat Modares University, Tehran, Iran.
3. BSc, 2001, Biology, Razi University, Kermanshah, Iran.

Education

Courses taken include:

Biochemistry of Biological Fluids
Biochemistry of Cancers
Biochemistry of Hormones
Inborn Metabolic Disorders
Trace elements
Biochemistry of Membrane
Kidney's physiology
Clinical Biochemistry
Enzymology
Human Physiology
Immunochemistry
Neurochemistry
Immunology
Toxicology
Metabolism
Molecular Biology
Molecular genetics

Work History:

Courses taught:

General Biochemistry

Enzymology

Molecular and Cellular Biology

Metabolism

Clinical Biochemistry

Quality control in medical laboratory

Hormones

Honors and Awards:

1. Ranked 595th among 550000 participants in the Nationwide University entrance exam, summer 1998.
2. Ranked 3rd among Biology students during the BSc period, July 2002.
3. Ranked 2nd among 1500 participants in the nationwide Clinical Biochemistry MSc entrance exam and received the exemption card of military service by the government for being ranked second, March 2003.
4. Ranked 2nd among 122 participants in the Clinical Biochemistry PhD entrance exam. July 2005.
5. Ranked 1st among Clinical Biochemistry students during the PhD period, September 2010.
6. The best medicine faculty member Researcher (2010), Ilam University of Medical Sciences, Iran.
7. The best medicine faculty member Researcher (2011), Ilam University of Medical Sciences, Iran.
8. The best medicine faculty member Researcher (2012), Ilam University of Medical Sciences, Iran.

Academic Experiences:

Researcher from 2002 to 2010: Dept. of Clinical Biochemistry, School of Medical Sciences, Tarbiat Modares Univ., Tehran, Iran. Lecturer and researcher since 2010: Dept. of Clinical Biochemistry, School of Medicine, Ilam University of Medical sciences, Ilam, Iran.

Membership of Scientific Societies:

Biochemical Society of Iran

Professional Experiences:

1. Cell culture
2. DNA and RNA extraction
3. Gene delivery
4. Gene silencing using RNAi
5. PCR and RT-PCR
6. PCR-RFLP
7. Cloning
8. Protein overexpression
9. Site-directed mutagenesis
10. SDS-PAGE
11. Western blotting
12. Monoclonal Antibody Generation
13. Lipid extraction and analysis
14. Enzyme assay
15. EMSA (Electrophoretic Mobility Shift Assay)

Research Interests:

Signaling of insulin
Molecular mechanism of insulin resistance and type 2 diabetes
Gene expression analyses in Insulin resistance and type 2 diabetes
Molecular mechanism of lipid-induced insulin resistance
Gene therapy for insulin resistance and type 2 diabetes
Gene delivery and gene silencing

Computer Skills:

General softwares: Power Point, Word, Excel, Photoshop, Internet

Specialized softwares: Gene Runner, Mandel, Phase, Oligo 7.

Books:

A) Translated Books (To Persian)

1. Henry's Clinical Diagnosis and Management by Laboratory Methods, 2007
2. Stryer's Biochemistry, 2007.
3. Harper's Biochemistry, 2006 and 2009.
4. Metabolic regulation in mammals, 2000.
5. Understanding Enzyme, 1998.

B) Authored Books

1. Set of multiple choice questions for Enzymology, 2008.

Patent and Patent Applications:

1. Meshkani R, **Bakhtiyari S**, Vakili S. Genearation of PTP-1B stable knokdown C2C12 skelatal muscle cells using shRNA. Iran Patent No. 390020840, May 17, 2011.

Research Publications:

1. **Bakhtiyari S**, Haghani K, Farhadi E, Soukhtanloo M, Rezaei N, Taghikhani M. A novel monoclonal antibody against A60 antigen of Mycobacterium bovis Bacillus Calmette-Guerin. *Hybridoma (Larchmt)*. 2010 Jun; 29(3):211-5.

2. Parvaneh L, Meshkani R, **Bakhtiyari S**, Mohammadtaghvaie N, Gorganifiruzjaee S, Taheripak G, Golestani A, Foruzandeh M, Larijani B, Taghikhani M.Palmitate and inflammatory state additively induce the expression of PTP1B in muscle cells. *Biochemical Biophysical Research Communication.* 2010 May 28; 396(2):467-71.

3. **Bakhtiyari S**, Meshkani R, Taghikhani M, Larijani B, Adeli K. Protein tyrosine phosphatase-1B (PTP-1B) knockdown improves palmitate-induced insulin resistance in C2C12 skeletal muscle cells. *Lipids*. 2010 Mar; 45(3):237-44.

4. **Bakhtiyari S**, Meshkani R, Taghikhani M, Larijani B. The Effects of PTP-1B Knockout on Glucose Uptake and Triglyceride Levels in C2C12 Skeletal Muscle Cells. *Iranian Journal of Diabetes and Lipid Disorders.* 2010; 9: 1- 8.

5. Saberi H, Mohammadtaghvaei N, Gulkho S, **Bakhtiyari S**, et al. The ENPP1 K121Q polymorphism is not associated with type 2 diabetes and related metabolic traits in an Iranian population. *Mol Cell Biochem* 2010.

6. Haghani K, Khajeh K, Hatef Salmanian A, Ranjbar B, **Bakhtiyari S**. Acid-induced formation of molten globule states in the wild type Escherichia coli 5-enolpyruvylshikimate 3-phosphate synthase and its three mutated forms: G96A, A183T and G96A/A183T. *The Protein Journal* 2011.

7. Naderi GA, **Bakhtiyari S**, Almasi A, Javanbakhti S, Mookhah R. Comparison the effects of selenium dioxide and green tea extract on serum lipids levels in rats. *Journal of Medicinal Plants* (Farsi), volume 5, pages: 16-20, 2003.

8. **Bakhtiyari S**, Taghikhani, Mookhah R, Khabiri AR. Production of Monoclonal Antibody against A60 from Mycobacterium Bovis BCG. *Scientific-Research Journal of Shahed University* (Farsi), N.66, pages: 1-6, 2005.

9. Mousapour A, Taghikhani M, Meshkani R, Khatami Sh, **Bakhtiyari S**, Haghani K. Studying the 3´UTR (1484insG) polymorphism of PTP1B gene in insulin-resistant and type 2 diabetic subjects. *Scientific Journal of School of Public Health and Institute of Public Health Research* (Farsi), volume 5, pages: 1-13, 2007.

10. Mohammad Alidoosti, Mahboobeh Ghaedi, Abbas Soleimani, **Salar Bakhtiyari**, Mehrnaz Rezvanfard, Shekufeh Golkhu, Narges Mohammadtaghvaei. Study on the role of environmental parameters and HIF-1A gene polymorphism in coronary collateral formation among patients with ischemic heart disease. *Clin Biochem*, 2011 Dec;44(17-18):1421-4.

11. Gholamreza Taheripak, **Salar Bakhtiari**, Masoumehl Rajabibazl, Parvin Pasalar, Reza Meshkani R. PTP1B knockdown prevents palmitate-induced apoptosis in mouse skeletal muscle cells. *Clin Biochem*, *Volume 44, Issue 13, Supplement*, *September 2011*, *Page S289.*

12. Sattar Gorgani, Reza Meshkani, **Salar Bakhtiari**. Leukocyte antigen-related (LAR) knockdown improves palmitate induced insulin resistance in C2C12 muscle cells *Clin Biochem*, *Volume 44, Issue 13, Supplement*, *September 2011*, *Page S277.*

13. Asie Sadeghi, Leila Parvaneh, Narges Taghvaei, **Salar Bakhtiari**, Ahmad Nasimian, Sanaz Vakili, Meshkani R. Rosiglitazone effect on palmitate-induced insulin resistance is independent of PTP1B expression. *Clin Biochem*, *Volume 44, Issue 13, Supplement*, *September 2011*, *Pages S3-S4.*

14. Haghani K, **Bakhtiyari S (corresponding author)**, Nouri AM. In vitro study of the differentiation of bone marrow stromal cells into cardiomyocyte-like cells. *Mol Cell Biochem*. 2012 Feb;361(1-2):315-20.

15. Haghani K, **Bakhtiyari S (corresponding author)**. The Study on the Relationship Between IRS-1 Gly972Arg and IRS-2 Gly1057Asp Polymorphisms and Type 2 Diabetes in the Kurdish Ethnic Group in West Iran. *Genet Test Mol Biomarkers*. 2012 Nov;16(11):1270-6.

16. Gorgani-Firuzjaee S, **Bakhtiyari S (First author)**, Golestani A, Meshkani R.Leukocyte antigen-related inhibition attenuates palmitate-induced insulin resistance in muscle cells. *J Endocrinol*. 2012 Oct;215(1):71-7.

17. Mojtaba Taran, Somayeh Bagheri, **Salar Bakhtiyari (corresponding author)**. Eco-Friendly Poly(3-hydroxybutyrate) Synthesis from Textile Wastewater and Its Process Optimization. *Pol J Environ Stud*. 2012. 21 (5): 1413-1416.

18. Mojtaba Taran, **Salar Bakhtiyari (corresponding author)**. Production of single cell protein by a halophilic microorganism using glucose as carbon source: Optimization of process variables in extreme conditions by Taguchi experimental design. *Global Adv Res J Microbiol.* 2013. 1(3): 041-046.

19. Mojtaba Taran, Elham Azizi, **Salar Bakhtiyari (corresponding author)**. Surface active agent production from olive oil in high salt conditions and its process optimization. *Pol J Chem Technol*. 2012. 14 (4)**:** 30-34.

20. Mojtaba Taran, **Salar Bakhtiyari (corresponding author)**. Optimization of single cell protein production from textile effluent at extreme conditions. *Toxicological Environ Chem*. 2013. 95(1): 110-117.

21. **Bakhtiyari S**, Haghani K, Basati G, Karimfar MH. siRNA therapeutics in the treatment of diseases. Ther Deliv. 2013. 4(1):45-57.

22. Mojtaba Taran, Arina Monaza, Javad Zavar Reza, Mazyar Safari, **Salar Bakhtiyari (corresponding author)**. Optimal conditions for the biological removal of arsenic by a novel halophilic archaea in different conditions and its process optimization. *Pol J Chem Technol*. 2013.15:7-9.

23. Somaieh Sabzali, **Salar Bakhtiyari (corresponding author)**, Arman Rostamzad , Mona Zamanian Azodi. Comparison of antibacterial effect of Thymbra spicata's essential oils with common therapeutic antibiotics. *Research In Medicine* (Farsi). 2013. 36(5):1-16.

24. Mohammad Hassan Karimfar, Firouze Niazvand, Reza Shirazi, Mohammad Reza Hafezi, **Salar Bakhtiyari (corresponding author)**, Shiva Kalantari. Investigating the antioxidant effect of melatonin on motility, ROS and malondialdehyde in cryo-preserved human sperms. *Research In Medicine* (Farsi). 2013. 36(5):30-35.

25. **Salar Bakhtiyari**, Azar Babakhani, Mohammad Hossein Maleki, Motahhareh Zaherara, Elham Davoodian, Kourosh Sayeh Miri, Seyed AbdolReza Mortazavi TabatabaeiThe relationship between rs2970847 polymorphism of PGC-1α gene and susceptibility to type 2 diabetes: a systematic review and meta-analysis. *Research In Medicine* (Farsi). 2013. 36(5):104-110.

26. Dousti M, Abdi J, **Bakhtiyari S**, Mohebali M, Mirhendi SH, Rokni MB. Genotyping of hydatid cyst isolated from human and domestic animals in Ilam Province, Western Iran using PCR-RFLP. *Iranian Journal of Parasitology*. 2013. 8(1), 2013, 47-52.

27. Sayehmiri F, **Bakhtiyari S**, Darvishi P, Sayehmiri K. Prevalence of Gestational Diabetes Mellitus in Iran: A Systematic Review and Meta-Analysis Study. *The Iranian Journal of obstetrics gynecology and infertility*. 2013. 15(40): 16-23.

28. Sabzali S, **Bakhtiyari S (corresponding author)**, Rostamzad A, Haghani K. A study of the anti-bacterial activities of Nerium oleander's hydroalcoholic extract. *Yafteh* (Farsi). 2013; 15 (2) :53-59

29. Farajollah Maleki, Karimeh Haghani, Shabnam Shokouhi, Khalil Mahmoodi, Kourosh Sayehmiri, Nejat Mahdieh, **Salar Bakhtiyar (corresponding author).** A case-control Study on the association of common variants of *CAPN10* gene and the risk of type 2 diabetes in an Iranian population. *Clinical Labratory* 2014. 60(4):663-70.

30. Shabnam Shokouhi, Karimeh Haghani, Ali Delpisheh, Mohsen Mahdizadeh, **Salar Bakhtiyar (corresponding author).** Association of rs7903146, rs12255372, and rs290487 polymorphisms in TCF7L2 gene with type 2 diabetes in an Iranian Kurdish ethnic group. *Clinical Labratory*. Accepted manuscript.

31. Hadi Mousavi, **Salar Bakhtiyar (corresponding author).** Hypopituitarism in neonate with hyperbilirubinemia and decreased level of consciousness: a case report study. *Acta Medica Iranica* 2014. 52(1):82-4.

32. Gholamreza Taheripak, **Salar Bakhtiyari**, Masoumeh Rajabibazl, Parvin Pasalar, Reza Meshkani. Protein tyrosine phosphatase 1B (PTP1B) inhibition ameliorates palmitate-induced mitochondrial dysfunction and apoptosis in skeletal muscle cells. *Free Radical Biology and Medicin*e 2013. 65:1435-46.

33. Pashaei S, Bakhtiyari S **(corresponding author)**, Haghani K, Maleki F. Investigating the Effects of TNF-α knockdown Gene on Insulin Resistance in C2C12 Muscle Cells in the Presence and Absence of Palmitate. *Iranian Journal of Endocrinology and Metabolism* 2014. 15(4): 387-94.

34. Sabzali S, **Bakhtiyari S (corresponding author)**, Rostamzad A, Shahzamani K. Effects of the hydroalcoholic extract of *Thymbra spicata* on some gram positive and gram negative pathogenic bacteria. *Yafteh* (Farsi). Accepted manuscript.

35. Sayehmiri K, Carson KV, **Bakhtiyari S**, Shokouhi S, Alimoghadam K. Effects of aGVHD and cGVHD according to relapse status on survival rate in patients with acute lymphocytic leukemia. Hematology. 2014 Jan 23. [Epub ahead of print]

36. Shabnam Shokouhi, Karimeh Haghani, Parveneh Borji, **Bakhtiyari S (corresponding author)**. Association between PGC-1α gene polymorphisms and type 2 diabetes risk: A case-control study of an Iranian population. Canadian Journal of Diabetes 2014. Accepted manuscript.
37. Mohsen Hosseinkhani, Davood Mehrabani, Mohammad Hassan Karimfar, **Salar Bakhtiyari**, Amir Manafi, Reza Shirazi. Tissue Engineered Scaffolds in Regenerative Medicine. World J Plastic Surgery 2014. 3(1): 3-7.

Presented & Published Abstracts in Congresses:

1. Khabiri AR, Taghikhani M, **Bakhtiyari S**. Purification and immunological characterization of secreted antigen of *Mycobacterium Tuberculosis*. Presented in the 17th National Congress of Tuberculosis. Isfahan, Iran, (14-16 Oct. 2003).

2. **Bakhtiyari S**. Naderi GA. Comparison of the antioxidant properties of selenium dioxide and green tea extract. Presented in the 2nd Symposium of Medicinal Plants. Tehran, Iran, (26-27 Jan. 2004).

3. **Bakhtiyari S**, Taghikhani M, Khabiri AR. Generation and characterization of monoclonal antibodies to 10 kDa culture filtrate proteins (CFP) of *Mycobacterium Tuberculosis*. Presented in the 8th Congress of Biochemistry and 1st International congress of Biochemistry and Molecular Biology. Tehran, Iran, (11-15 Sep. 2005).

4. **Bakhtiyari S**, Taghikhani M, Khabiri AR. Production and purification of monoclonal antibody against A60 from *Mycobacterium Tuberculosis*. Presented in the 8th Congress of Biochemistry and 1st International congress of Biochemistry and Molecular Biology. Tehran, Iran, (11-15 Sep. 2005).

5. Naderi GA, Mookhah R, Atyabi M, **Bakhtiyari S**. Comparison of the inhibitory effects of artemisinin, dihydroartemisinin, and cyclosporine on the calcineurin enzyme. Presented in the 14th National and 2nd International conference of Biology. Tehran, Iran, (29-31 Aug. 2006).

Journal Referee:

1. International Journal of Biological Macromolecules
2. Journal of Ilam University of Medical Sciences
3. Journal of Research in Medical Sciences
4. Genetic Testing and Molecular Biomarkers
5. International Journal of Preventative Medicine
6. Natural Product Research

REFRENCES:

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2. **Dr. Reza Meshkani (Associated Professor)**

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