

Curriculum Vitae

Narges Mohammadtaghvaei Ph.D

Personal information:

Nationality: Iranian

Gender: Female

Current address:

Department of Laboratory Medicine, Faculty of Paramedical Sciences, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran

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Language: Persian as mother tongue and English as scientific language

Education

- Ph. D in clinical chemistry(2005-2010)Tarbiat Modares University, Tehran, Iran
Score: 18of 20
- M. Sc. in Biochemistry (2000-2002) Shahid Beheshti University, Tehran, Iran
Score: 18of 20
- B. Sc. in Laboratory Medicine (1996) Ahvaz University, Iran
Score: 17of 20

Working Experience

Assistant professor,Department of Laboratory Medicine, Faculty of Paramedical Sciences, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran(2010-2015)

Research scholar, Diabetes division, University of Texas health science center at San Antonio, San Antonio, Texas, USA (2013-2014)

Thesis:

1-The thesis to fulfill the M. Sc. Degree presented to Shahid Beheshti University entitled:

Effects of epinephrine on TNF α and leptin concentration in diet induced obesity in rats.

Supervisor: Dr. Noshabeh Pejhan

The Experiments of the thesis:

- Animal model of Diet-induced obesity
- ELISA
- Western blot
- Electrophoresis

2-The thesis of Ph. D. in Tarbiat Modares University entitled:

Molecular mechanism of palmitate induced-Protein tyrosine phosphatase 1B (PTP1B) gene expression at transcriptional level in muscle cell line (C2C12)

Supervisor: Dr. Mohammad Taghikhani

Advisors: Dr. Reza meshkani

The Experiments of Ph.D thesis:

- DNA and RNA extraction
- Primer designing
- PCR and RT-PCR
- Real time PCR
- Gene cloning

- Production and Purification of Plasmid
- Promoter analysis
- Culture of C2C12 cells
- Coculture system
- Treatment of C2C12 by fatty acids
- MTT assay
- Transfection of C2C12 cells by Ca-Phosphate
- Transduction of C2C12 by Lentivirus
- Luciferase activity assay
- Nuclear extraction
- Electrophoresis mobility shift assay(EMSA)

Other experimental Skill during Ph.D:

- Mammalian cell culture (CHO ,HEK 293T , C2C12,HepG2,3T3-L1)
- Transduction of mammalian cell (HepG2 ,C2C12) by expression vector (calcium-phosphate , fugene 6 ,lipofectamine,..)
- General skills for example SDS-PAGE ,ELISA, Western Blot, HPLC
- DNA extraction
- PCR-RFLP
- Isolation and characterization of mesenchymal stem cell from bone marrow and Adipose tissue from human and mouse
- Mesenchymal stem cell Culture
- Lentivirus production
- Transduction of mesenchymal stem cell by Lentivirus

Working Experience

1-Assistant professor,Department of Laboratory Medicine, Faculty of Paramedical Sciences, Ahvaz Jundishapur University of Medical Sciences, Ahvaz, Iran(2010-2015)

2-Research scholar, Diabetes division, University of Texas health science center at San Antonio, San Antonio, Texas, USA (2013-2014)

Experimental Skills during these projects:

- Immunoprecipitation
- Measuring cell metabolism by seahorse analyzer
- Gene silencing
- Use of radioisotopes to measure the rate of pyruvate oxidation
- Measurement of the rate of glucose production with florescent techniques
- Animal experiment
- Glucose Clamp Study in mouse
- Muscle primary cell culture
- RT-PCR
- Taqman Real Time PCR
- Cell proliferation assay
- Western blot

Publication

Palmitate-induced PTP1B expression is mediated by ceramide and nuclear factor κ B (NF- κ B) activation

[Narges MohammadTaghvaei](#), Taheripak Golamreza, Mohammad Taghikhani, Reza Meshkani

Published in *Cell Signal*. 2012 Oct;24(10):1964-70

Palmitate enhances protein tyrosine phosphatase 1B (PTP1B) gene expression at transcriptional level in C2C12 skeletal muscle cells.

[MohammadTaghvaei N](#), Meshkani R, Taghikhani M, Larijani B, Adeli K.

Published in *Inflammation*. 2011 ; 34(1):43-8.

Palmitate and inflammatory state additively induce the expression of PTP1B in muscle cells.

Parvaneh L, Meshkani R, Bakhtiyari S, [Mohammadtaghvaei N](#), Gorganifiruzjaee S, Taheripak G, Golestani A, Foruzandeh M, Larijani B, Taghikhani M.

Published in *Biochem Biophys Res Commun.* 2010;396(2):467-71.

Mesenchymal stem cells as vehicles for targeted delivery of antiangiogenic protein to solid tumors.

Mahboobe Ghaedi, Masoud Soleimani, [Narges Mohammad Taghvaei](#), Mahmood Sheikhfatollahi, Keyhan Azadmanesh, Abbas S. Lotfi, Jian Wu

Published in *Gene Medecine.* 2011; 13: 171–180.

Study on the role of environmental parameters and HIF-1A gene polymorphism in coronary collateral formation amongst patients with ischemic heart disease

, Mohammad Alidoosti, Mahboobeh Ghaedi, Abbas

Soleimani, MD Salar Bakhtiyari, Mehrnaz Rezvanfard, Shekufeh Golkhu and [Narges Mohammadtaghvaei](#) (corresponding author)

Published in *Clin Biochem.* 2011 Dec;44(17-18):1421-4

The ENPP1 K121Q polymorphism is not associated with type 2 diabetes and related metabolic traits in an Iranian population.

Saberi H, [Mohammadtaghvaei N](#), Gulkho S, Bakhtiyari S, Mohammadi M, Hanachi P, Gerayesh-Nejad S, Zargari M, Ataei F, Parvaneh L, Larijani B, Meshkani R.

Published in *Mol Cell Biochem.* 2011;350(1-2):113-8.

Lipid profile and inflammatory markers associated with estrogen receptor alpha PvuII and XbaI gene polymorphisms.

Boroumand M, Ghaedi M, [Mohammadtaghvaei N](#), Pourgholi L, Anvari MS, Davoodi G, Amirzadegan A, Saadat S, Sheikhfathollahi M, Goodarzynejad H.

Published in *Transl Res.* 2009 ; 153(6):288-95.

Association of estrogen receptor alpha gene polymorphism with the presence of coronary artery disease documented by coronary angiography.

Boroumand M, Ghaedi M, [Mohammadtaghvaei N](#), Pourgholi L, Anvari MS, Davoodi G, Amirzadegan A, Saadat S, Sheikhfathollahi M, Goodarzynejad H.

Published in *Clin Biochem.* 2009 ; 42(9):835-9.

Genetic Polymorphisms of Estrogen Receptors in Iranian Women with Diabetes and Coronary Artery Disease

Shekufeh Golkhu, Mahboobe Ghaedi, [Narges Mohammad Taghvaei](#), Mohammad Ali Boroumand, Gholamreza Davoodi, Alireza Aminzadegan, Leila Poorgoli, Mahmood Sheikh Fathollahi

Published in *Iranian journal of medicine*, 2009. 5 (3), 74-79

Evaluation of accuracy, precision and consensus of four laboratory glucose measurement kits with reference method

[Mohammadtaghvaei N](#), Jalali MT, shahbazian HB, Saki A

Published in *mljgoums*, 2015;9(2):39-46

Projects:

- **Molecular mechanism of palmitate induced-Protein tyrosine phosphatase 1B (PTP1B) gene expression at transcriptional level in muscle cell line (C2C12)**
Reza meshkani, Narges Mohammadtaghvaei
- **Effects of sex hormones on protein tyrosine phosphatase 1B(PTP1B) gene expression in muscle cell line .**
Reza meshkani, Narges Mohammadtaghvaei
- **Study of viability and proliferation of mesenchymal stem cells in presence of palmitate**

Narges Mohammadtaghvaei

- **Study of association of vascular endothelial growth factor polymorphism with coronary collaterals formation in patient with coronary artery disease from Tehran Heart center**

Narges Mohammadtaghvaei

- **The role of fibroblast growth factor 21 and protein tyrosine phosphatase 1B in insulin resistance in normal pregnancy**

Narges Mohammadtaghvaei

- **vitamin D-binding protein and vitamin D status in an Iranian population**

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- **Effects of vitamin D supplementation on total and bioavailable 25-hydroxyvitamin D levels with different vitamin D binding protein genotype**

Narges Mohammadtaghvaei

- **Vitamin D status in Iranian diabetic patients.**

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Teaching experience:

- Biochemistry to Medical students
- Biochemistry to B.Sc and M.Sc students
- Clinical chemistry to M.Sc and Ph.D students
- Practical Biochemistry to M.Sc students and medical students
- Practical cell culture & stem cell culture to M.Sc and Ph.D students

Books

- **Metabolic Regulation**

Adena publication, Tehran. Iran

References:

- **Dr.Muhammad A Abdul-Ghani, MD, PhD**
Associate Professor of Medicine
Diabetes Division, University of Texas Health Science Center at San Antonio, San Antonio. TX, USA. abdulghani@uthsca.edu
- **Dr.Reza Meshkani, PhD**
Associate Professor of Medicine
Department of Biochemistry, Faculty of Medicine, Tehran University of Medical Sciences, Tehran, Iran. rmeshkani@tums.ac.ir
- **Mohammad Taghikhani**
Professor of Medicine
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