"In the Name of God"

Curriculum vitae

Personal Data

Name: Ali Last name: Noori-Zadeh

Date of Birth: September 22, 1984

Marital Status: Married Nationality: Iranian



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Academic Member at Department of Clinical Biochemistry, Faculty of Medicine, Ilam University of Medical Sciences, Ilam, Iran.

• Educational History

PhD, Clinical Biochemistry, Tarbiat Modares University, Tehran, Iran: 2011-2017
 MSc, Clinical Biochemistry, Tarbiat Modares University, Tehran, Iran: 2008-2011
 BSc, General Biology, Razi University, Kermanshah, Iran: 2003-2007

• Theses and Supervisors:

MSc Thesis:

Transfection of Bone marrow stromal cells with Glial Cell line-derived Neurotrophic Factor (GDNF) and evaluation of in vitro gene expression. Dr Seyed Alireza Mesbah-Namin, Dr Taki Tiraihi.

PhD thesis:

Evaluation of *FOXP3*, *BACH2* gene quantitative expressions and *FOXP3* promoter status in the isolated regulatory T cells of the experimental autoimmune encephalomyelitis (EAE) mice model in comparison with control mice. Dr Seyed Alireza Mesbah-Namin, Dr Ali Akbar Saboor-Yaraghi.

• Honors and Awards:

- 1. Ranked first, among Clinical Biochemistry PhD entrance exam participants, 2011.
- 2. Best presentation in the 14th international congress of biochemistry in Tehran

• Educational:

Department of Clinical Biochemistry, Faculty of Medicine, Islamic Azad University, Shahrood branch, Shahrood, Iran.

Academic member of Department of Clinical Biochemistry, Faculty of Medicine, Ilam University of Medical Sciences, Ilam, Iran.

Bachelor Courses:

Quality control (QC) in the clinical labs General biochemistry Medical biochemistry 1 Medical biochemistry 2 Experimental techniques in clinical biochemistry

MSc Courses:

Bioinformatics General biochemistry Advanced Topics in Biochemistry Experimental techniques in Biochemistry

PhD Courses:

Practical Enzymology Advanced Topics in Molecular Biology Molecular Genetics Biology of Cancer

• Research Experiences:

1- Member of Shefa Neurosciences Research Center at khatam Al-anbia hospital, Tehran, Iran (5 years).

2- Molecular techniques education to the attended MSc and PhD students in the Shefa Neurosciences Research Center and supervising them.

• Clinical laboratory experience:

Central and emergency labs at Aiyat-allah Taleghani hospital, Tehran, Iran (Shahid Beheshti University) for one year.

• General software skills:

Microsoft Office Word, Microsoft Office PowerPoint, Microsoft Office Excel, Adobe Photoshop, Adobe Acrobat

• Specialized Bioinformatics skills:

- 1. Primer design software: Genruner, Oligo7, Methprimer...
- 2. Nucleic acids software: Chromas, Geneious...
- 3. Software which predicts 3D structures of biomolecules such as RNA, DNA and proteins
- 4. Protein databases such as Uniprot, SWISS-PROT, PDB...
- 5. Nucleic acid databases such as Ensemble, Gene, UCSC, BLAST...
- 6. Drug design software
- 7. Molecular docking software such as Molegro...
- 8. Meta-analysis and systematic review software
- 9. Statistical software such as SPSS...
- 10. Endnote software

• Professional Experiences:

- Laboratory Experimental disease models development:
 - 1- EAE mouse model for MS disease
 - 2- Parkinson rat model (6-OH dopamine)

- Experimental techniques:
 - 1- Prokaryotic cell culture
 - 2- Eukaryotic cell culture
 - 3- DNA extraction
 - 4- RNA extraction
 - 5- Plasmid extraction
 - 6- Agarose gel electrophoresis
 - 7- Conventional Polymerase chain reaction (PCR)
 - 8- cDNA synthesis
 - 9- RT-PCR
 - 10- Real-time PCR
 - 11- Real-time RT-PCR
 - 12- Bacterial transformation
 - 13- Eukaryotic cell transfection
 - 14- Eukaryotic cell stabilization
 - 15- Gene cloning
 - 16- Restriction fragment length polymorphism (RFLP)
 - 17- Colony PCR
 - 18- Restriction enzyme digestion
 - 19- SDS-PAGE
 - 20- Western blot
 - 21- Dot blot
 - 22- Immunocytochemistry (ICC)
 - 23- Immunohitochemistry (IHC)
 - 24- Methylation specific PCR (MSP)
 - 25- Methylation bisulfite PCR (BSP)
 - 26- ARMS-PCR (Allele Specific PCR)
 - 27- Magnetic-activated cell sorting (MACS)
 - 28- Stem cell isolation and culture (BMSCs, ADSCs, NSCs...)
 - 29- Flow cytometry
 - 30- Immune cell isolation (T cell...)

31- Transduction (using vectors which their backbone derived from genome of viruses).

• Research fields of interest:

- **1.** Clinical chemistry
- 2. Neurochemistry
- 3. Celular and molecular bases of neurodegenerative diseases
- 4. Molecular genetics and *epigenetics* bases of neurodegenerative diseases

• Publications:

- Book Compilation:
- 1- Biochemistry of hormones and signaling, in Persian:

بیوشیمی هورمون و مسیرهای سیگنالینگ، نورالدین بختیاری، علی نوری زاده، روح الله همتی، فرزاد یوسفی، زهرا هوشمندی، علی ریاحی مدوار. زیر نظر دکتر سامان حسین خانی .انتشارات خانه زیست شناسی.

• Papers

 Non-viral human proGDNF gene delivery to rat bone marrow stromal cells under ex vivo conditions. <u>Ali Noori-Zadeh</u>, Mesbah-Namin SA, Tiraihi T, Rajabibazl M, Taheri T. J Neurol Sci. 2014 Apr 15;339(1-2):81-6. doi: 10.1016/j.jns.2014.01.025. Epub 2014 Jan 31.PMID: 24518204.

Journal Impact Factor: 2.262

2- Evaluation of lovastatin effects on expression of anti-apoptotic Nrf2 and PGC-1α genes in neural stem cells treated with hydrogen peroxide. Abdanipour A, Tiraihi T, <u>Ali</u> <u>Noori-Zadeh</u>, Majdi A, Gosaili R. Mol Neurobiol. 2014 Jun;49(3):1364-72. doi: 10.1007/s12035-013-8613-5. Epub 2014 Jan 5. PMID: 24390568.

Journal Impact Factor: 5.286

3- In vitro study of the long-term cortisol treatment effects on the growth rate and proliferation of the neural stem/precursor cells. Abdanipour A, Sagha M, <u>Ali Noori-Zadeh</u>, Pakzad I, Tiraihi T. Neurol Res. 2015 Feb;37(2):117-24. doi: 10.1179/1743132814Y.0000000431. Epub 2014 Aug 1.

Journal Impact Factor: 1.449

4- Systemic administration of valproic acid stimulates overexpression of microtubuleassociated protein 2 in the spinal cord injury model to promote neurite outgrowth. Abdanipour A, Schluesener HJ, Tiraihi T, <u>Ali Noori-Zadeh</u>. Neurol Res. 2015 Mar;37(3):223-8. doi: 10.1179/1743132814Y.0000000438. Epub 2014 Sep 9.

Journal Impact Factor: 1.449

5- Human ciliary neurotrophic factor–overexpressing stable bone marrow stromal cells in the treatment of a rat model of traumatic spinal cord injury. Hojjat-Allah Abbaszadeh, Taki Tiraihi, <u>Ali Noori-Zadeh</u>, Ali Reza Delshad, Majid Sadeghizade, Taher Taheri. Cytotherapy. 2015 Jul;17(7):912-21. doi: 10.1016/j.jcyt.2015.03.689. Epub 2015 May 1.

Journal Impact Factor: 3.293

6- Melatonin alleviates bleomycin-induced pulmonary fibrosis in mice. Karimfar MH, Rostami S, Haghani K, Bakhtiyari S, <u>Ali Noori-Zadeh</u>. J Biol Regul Homeost Agents. 2015 Apr-Jun;29(2):327-34.

Journal Impact Factor: 2.406

7- Regulatory T cell number in multiple sclerosis patients: A meta-analysis. <u>Ali Noori-Zadeh</u>*(corresponding author), Seyed Alireza Mesbah-Namin, Sara Bistoon-beigloo, Salar Bakhtiyari, Hojjat-Allah Abbaszadeh, Shahram Darabi, Masoumeh Rajabibazl, Alireza Abdanipour. Multiple Sclerosis and Related Disorders, Volume 5, January 2016, Pages 73–76. doi:10.1016/j.msard.2015.11.004.

Journal Impact Factor: 0.91

8- Evaluation of the antibacterial activity of the Althaea officinalis L. leaf extract and its wound healing potency in the rat model of excision wound creation. Rezaei M, Dadgar Z, <u>Ali Noori-Zadeh</u>, Mesbah-Namin SA, Pakzad I, Davodian E. Avicenna J Phytomed. 2015 Mar-Apr;5(2):105-12.

9- Epigenetic and gene expression alterations of FOXP3 in the T cells of EAE mouse model of multiple sclerosis. <u>Ali Noori-Zadeh</u>, Seyed Alireza Mesbah-Namin, Ali Akbar Saboor-Yaraghi. Journal of the Neurological Sciences xxx (2017) 5(2):105-12.

Journal Impact Factor: 2.262

10-Short-term ursolic acid promotes skeletal muscle rejuvenation through enhancing of SIRT1 expression and satellite cells proliferation. Nuredin Bakhtiari, Saman Hosseinkhani, Masoud Soleimani, Roohullah Hemmati, <u>Ali Noori-Zadeh</u>, Mohammad Javan, Amin Tashakor. Biomedicine & Pharmacotherapy, Volume 78, March 2016, Pages 185–196.

Journal Impact Factor: 2.023

11- Di-(2-ethylhexyl) Phthalate-Induced Hippocampus-Derived Neural Stem Cells Proliferation. Alireza Abdanipour, <u>Ali Noori-Zadeh</u>, Seyed Alireza Mesbah-Namin, Salar Bakhtiyari, Reza Nejatbakhsh, Iraj Jafari Anarkooli. Cell Journal(Yakhteh), Vol 19, No 1, Apr-Jun (Spring) 2017, Pages: 166-172.

Journal Impact Factor: 1.275

- 12- Transfection of BMSCs by pSec-Tag-A-CNTF for spinal cord injury. Abbaszadeh Hojjatallah, Tirahi Taki, <u>Ali Noori-Zadeh</u>, Sadeghizade Majid, Azizzadeh Delshad Alireza, Taheri Taher, Kazemi Hadi. Daneshvar medicine. May 2014, Volume 21, Number 110.
- 13-Comparison of Adipose-Derived Stem Cells and Bone Marrow Stromal Cells in Prolonged Passages Based on Viability and Auto-Differentiation. Abdanipour A, <u>Ali</u> <u>Noori-Zadeh</u>, Mohamadi Z, Rashid Sheykh Ahmad F, Akbari P. Journal of Rafsanjan University of Medical Sciences. 2015; 13 (12):1141-1152.
- 14- A Comparison Study between Adipose-Derived Stem Cells and Bone Marrow Stromal Cells Based on Self-Renewal Potential of Various Passages. Abdanipour A, <u>Ali Noori-</u> <u>Zadeh</u>, Majdi A. JSSU. 2015; 23 (1):1805-1815.
- 15- A Case Report on Variation in Bifurcation of Brachial Artery. Fatemeh Fadai Fathabadi, Hojjat-Allah Abbaszadeh, Mohsen Noorozian, Mohammad Bayat, Hadi Azimi, <u>Ali</u> <u>Noori-Zadeh</u>, Reza Mastery Farahani. ASJ 2015, 12(2): 97-100.
- 16- Low level of autophagy related gene 10 (ATG10) expression in the 6-hydroxydopamine rat model of Parkinson disease. Marzieh Shams Nooraei, <u>Ali Noori-Zadeh</u>, Shahram Darabi, Farzad Rajaei, Zohreh Golmohammadi, Hojjat allah abbaszadeh⁻ IBJ journal.
- 17- Creatine and Retinoic acid effects on the induction of autophagy and differentiation of Adipose Tissue-Derived Stem Cells into GABAergic-like neurons. Darabi S, Tiraihi T, <u>Ali Noori-Zadeh</u>, Rajaei F, Abbaszadeh H, Darabi L. JBUMS. 2017; 19 (8):41-49.

• Paper abstracts (presented as a poster in congress):

- In vitro transfection of neural stem cells by pSectag2A-NT4 and evaluation of its expression. Sedigheh Mohammad Ghasemi, Taki Tiraihi, <u>Ali Nourizadeh</u>, Hadi kazemi. BCNC congress.
- Evaluation of Non-Viral Gene Delivery to Bone Marrow Stem Cells. <u>Ali</u> <u>Nourizadeh</u>, Seyed A. Mesbah-Namin, Taki Tiraihi, Taher Taheri. Spinal cord injury congress. BCNC congress.
- GDNF overexpression in transfected bone marrow stromal cells as a treatment method in spinal cord injury. Medicina genetic congress. <u>Ali Nourizadeh</u>, Seyed A. Mesbah-Namin, Taki Tiraihi, Taher Taheri.
- E.poster [A-10-1209-1], Evaluation of NT3 gene expression in bone marrow stromal stem cell, Darabi Shahram, Tiraihi Taki, <u>Nourizadeh Ali</u>.
- 5. In vitro investigation of genes that control BMSC-derived neurosphere motility. <u>Ali</u> <u>Noori-Zadeh</u>, Ali gorji, Taki tiraihi.BCNC congress.
- Lovastatin protects neural stem cells against H2O2-induced oxidative damage by inducing PGC-1α and Nrf2 gene expressions. Alireza Abdanipour, <u>Ali Noori-Zadeh</u>, Ramin Gosaili, Arezo Majdi. Road safety congress.
- The Incidence of Traumatic Brain Injury: a review on incidence and cost in the world. <u>Ali</u> <u>Noori-Zadeh</u>, Peir Hossein Koulivand. Road safety congress.
- Non-viral human proGDNF gene delivery to rat bone marrow stromal cells under ex vivo conditions. <u>Ali Noori-Zadeh</u>, Seyed Alireza Mesbah-Namin, Taki Tiraihi, Masoumeh Rajabibazld. Road safety congress.
- 9. In vitro investigation of genes which derive BMSC-derived neurosphere motility. <u>Ali</u> <u>Noori-Zadeh</u>, Ali gorji, Taki tiraihi, Seyed alireza mesbah-namin.
- FOXP3 gene expression status in the regulatory T cells of mouse model of multiple sclerosis (EAE). <u>Ali Noori-Zadeh</u>, Seyed Alireza Mesbah-Namin, Ali Akbar Saboor-Yaraghi. 14th biochemistry congress.
- 11. *FOXP3* promoter methylation status investigation in the regulatory T cells isolated from the spleen of experimental autoimmune encephalomyelitis. <u>Ali Noori-Zadeh</u>, Seyed Alireza Mesbah-Namin, Ali Akbar Saboor-Yaraghi. 14th biochemistry congress (Best presentation among more than 500 posters).

• Speech in congress:

1. 12th Iranian congress of biochemistry and 4 international congress of biochemistry and molecular biology. Mashhad. Rat bone marrow stromal cells in vitro transfection by the pSectag2B-human pro-GDNF vector and assessment of its expression.

 Basic and clinical neuroscience congress, 2012. In vitro transfection of rat bone marrow stromal cells by the pSectag2B-human pro-GDNF vector and evaluation of its expression.

• Recently completed investigations:

- 1. The effects of Ursolic acid and C-peptide on the protein markers involving in the proliferation and myogenesis of satellite cells of the skeletal muscle of mice.
- 2. In vitro investigation of the Lovastatin effects on the *PGC1alpha* and *Nrf2* gene expression in the neural stem cells under oxidative stress.
- CHOP protein levels in the serum and cerebro-spinal fluids of relapsing- remitting multiple sclerosis patients during the relapse phase of the disease in comparison with the control group.
- 4. T regulatory cell number investigation in the multiple sclerosis patients in comparison with the control group.
- FOXP3 and BACH2 quantitative expression and FOXP3 promoter methylation status investigation in the experimental autoimmune encephalomyelitis in comparison with mouse controls.

• Under investigation proposals:

- 1. Cell signaling pathways in the unfolded proteins investigation in the mouse model of Parkinson disease.
- 2. Simvastatin effects on the cell signaling pathways of unfolded protein response in the mouse model of Parkinson disease.
- 3. Trehalose effects on cell signaling pathways of unfolded protein response in the mouse model of Parkinson disease.

- **4.** In vitro investigation of the Trehalose effects on the *PGC1alpha* and *Nrf2* gene expression **in the mouse model of Parkinson disease**.
- 5. In vitro investigation of the Simvastatin effects on the *PGC1alpha* and *Nrf2* gene expression in the mouse model of Parkinson disease.

• Journal Referee:

• Iranian journals:

Journal of Ilam University of medical sciences

• International journals:

- 1- Journal of the Neurological Sciences
- 2- Arquivos Brasileiros de Endocrinologiae Metabologia
- 3- Journal of Pediatric Biochemistry
- 4- Journal of biological regulators and homeostatic agents
- 5- Osong Public Health and Research Perspectives

• Congress Referee:

6th International Congress of Laboratory and Clinic (ششمین کنگره بین المللی)

- References:
- Dr. Seyed Alireza Mesbah-Namin (Associated Professor)
 Dept. of Clinical Biochemistry, Faculty of Medicine, Tarbiat Modares University, Iran
- Dr. Mohammad Javad Rasaei (Professor)
 Dept. of Clinical Biochemistry, Faculty of Medicine, Tarbiat Modares University, Iran
- Dr. Ali Akbar Saboor-Yaraghi (Professor)
 Dept. of immunology, Faculty of Medicine, Tehran University, Iran