"In the Name of God"

Curriculum Vita (C.V.)



☐ 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

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

☐ 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, (2016)
- 3. Best researcher at Ilam University of Medical Sciences, (2017)
- 4. Best researcher at Ilam University of Medical Sciences, (2018)

□ Executive history

- ***** Editorial member: American Journal of Surgery and Clinical Case Reports
- **DO director of Allied medical Sciences at Ilam University of Medical Sciences**
- **❖** Post-graduate director of Allied medical Sciences at Ilam University of Medical Sciences
- Member of research financial committee Sciences at Ilam University of Medical Sciences
- Advisory Masters Director at Allied medical Sciences at Ilam University of Medical Sciences
- **❖** Head of Student Research Committee of Ilam University of Medical Sciences

☐ 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.

□ 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.

\square 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)

\square 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 whose backbone derived from viral genome).
- \square Research fields of interest
- 1. Clinical chemistry
- 2. Neurochemistry
- 3. Cellular and molecular bases of neurodegenerative diseases
- 4. Molecular genetics and epigenetics bases of neurodegenerative diseases

- > Publications
- Book Compilation
- 1- Biochemistry of hormones and signaling pathways, 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.

Research papers

1- Non-viral human proGDNF gene delivery to rat bone marrow stromal cells under ex

vivo conditions. Ali Noori-Zadeh, 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: 2.448

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, Ali Noori-

Zadeh, 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, Ali Noori-Zadeh,

I, T. Pakzad Tiraihi Neurol Res. 2015 Feb;37(2):117-24. doi:

10.1179/1743132814Y.0000000431. Epub 2014 Aug 1.

Journal Impact Factor: 1.449

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, Ali Noori-Zadeh. 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, Ali Noori-Zadeh, 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: 3.993

6- Melatonin alleviates bleomycin-induced pulmonary fibrosis in mice. Karimfar MH,

Rostami S, Haghani K, Bakhtiyari S, Ali Noori-Zadeh. J Biol Regul Homeost Agents. 2015

Apr-Jun;29(2):327-34.

Journal Impact Factor: 1.397

7- Regulatory T cell number in multiple sclerosis patients: A meta-analysis. Ali Noori-

Zadeh*(corresponding author), Seyed Alireza Mesbah-Namin, Sara Bistoonbeigloo, 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: 3.199

8- Epigenetic and gene expression alterations of FOXP3 in the T cells of EAE mouse model

of multiple sclerosis. Ali Noori-Zadeh, Seyed Alireza Mesbah-Namin, Ali Akbar Saboor-

Yaraghi. Journal of the Neurological Sciences xxx (2017) 5(2):105-12.

Journal Impact Factor: 2.448

9- 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, Ali Noori-Zadeh, Mohammad Javan, Amin Tashakor.

Biomedicine & Pharmacotherapy, Volume 78, March 2016, Pages 185–196.

Journal Impact Factor: 3.457

10- Di-(2-ethylhexyl) Phthalate-Induced Hippocampus-Derived Neural Stem Cells

Proliferation. Alireza Abdanipour, Ali Noori-Zadeh, 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: 2.363

11- Transfection of BMSCs by pSec-Tag-A-CNTF for spinal cord injury. Abbaszadeh

Hojjatallah, Tirahi Taki, Ali Noori-Zadeh, Sadeghizade Majid, Azizzadeh Delshad Alireza,

Taheri Taher, Kazemi Hadi. Daneshvar medicine. May 2014, Volume 21, Number 110.

12- Comparison of Adipose-Derived Stem Cells and Bone Marrow Stromal Cells in

Prolonged Passages Based on Viability and Auto-Differentiation. Abdanipour A, Ali Noori-

Zadeh, Mohamadi Z, Rashid Sheykh Ahmad F, Akbari P. Journal of Rafsanjan University of

Medical Sciences. 2015; 13 (12):1141-1152.

13- A Comparison Study between Adipose-Derived Stem Cells and Bone Marrow Stromal

Cells Based on Self-Renewal Potential of Various Passages. Abdanipour A, Ali Noori-Zadeh,

Majdi A. JSSU. 2015; 23 (1):1805-1815.

14- A Case Report on Variation in Bifurcation of Brachial Artery. Fatemen Fadai Fathabadi,

Hojjat-Allah Abbaszadeh, Mohsen Noorozian, Mohammad Bayat, Hadi Azimi, Ali Noori-

Zadeh, Reza Mastery Farahani. ASJ 2015, 12(2): 97-100.

15- Low level of autophagy related gene 10 (ATG10) expression in the 6-hydroxydopamine

rat model of Parkinson disease. Marzieh Shams Nooraei, Ali Noori-Zadeh, Shahram Darabi,

Farzad Rajaei, Zohreh Golmohammadi, Hojjat allah abbaszadeh. 2018, IBJ journal.

16- 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, Ali

Noori-Zadeh, Rajaei F, Abbaszadeh H, Darabi L. JBUMS. 2017; 19 (8):41-49.

17- Trehalose Activates Autophagy and Prevents Hydrogen Peroxide-Induced Apoptosis in

the Bone Marrow Stromal Cells. S Darabi, A Noori-Zadeh, HA Abbaszadeh, F Rajaei. Iranian

journal of pharmaceutical research: IJPR 17 (3), 1141.

Journal Impact Factor: 1.372

18- Lithium prevents cell apoptosis through autophagy induction. FR H. Kazemi, A. Noori-

Zadeh, S. Darabi. Bratislava Medical Journal, 2018, 119 (4), 234-239

Journal Impact Factor: 0.678

19- Therapeutic Effects of Laser on Partial Osteotomy in the Rat Model of

Hypothyroidism. Niloofar Sefati, Hojjat allah Abbaszadeh, Fatemeh Fadaee Fath Abadi,

Mohammad Amin Abdullahifar, Abdullah Amini, Ali Noori-Zadeh, Shahram Darabi, Mohsen

Norouzain. Journal of Lasers in Medical Sciences, 2018, 9 (2), 121-127.

20- Human wild-type superoxide dismutase 1 gene delivery to rat bone marrow stromal cells: its importance and potential future trends. Abedi M, Mesbah-Namin SA, Noori-Zadeh A, Tiraihi T, Taheri T. Iran J Basic Med Sci 2018; 21:688-694.

Journal Impact Factor: 1.514

21- Decrease in cavity size and oligodendrocyte cell death using neurosphere-derived oligodendrocyte-like cells in spinal cord contusion model. Hojjat Allah Abbaszadeh, Taki Tiraihi, Yousef Sadeghi, Ali Reza Delshad, Majid Sadeghizadeh, Taher Taheri, Ali Noori-Zadeh. Iranian biomedical journal. 2017, 22 (4), 246-257.

22- Prevalence of fragile X syndrome among patients with mental retardation in the west of Iran. P Hadi, K Haghani, **A Noori-Zadeh**, S Bakhtiyari. Frontiers in Biology, 1-5.

23- Stem cell transplantation and functional recovery after spinal cord injury: a systematic review and meta-analysis. Hojjat-Allah Abbaszadeh, Somayeh Niknazar, Shahram Darabi, Navid Ahmady Roozbahany, Ali Noori-Zadeh, Seyed Kamran Ghoreishi, Maryam Sadat Khoramgah, Yousef Sadeghi. Anatomy & cell biology. 2018, 51 (3), 180-188.

24- Investigation of Autophagy-Related Gene Expressions in the Rat Model of Parkinson Disease. Zohreh Golmohammadi, **Ali Noori-Zadeh**, Farzad Rajaei, Leila Darabi, Hatef Ghasemi Hamidabadi, Hojjat-Allah Abbaszadeh, Salar Bakhtiyari, Mohammad Amin Abdollahifar, Shahram Darabi. CRESCENT JOURNAL OF MEDICAL AND BIOLOGICAL SCIENCES. 2018, 5 (4), 285-291.

25- Frequency of CD8+ regulatory T cells in the multiple sclerosis patients: a systematic

review and meta-analysis. A Seidkhani-Nahal, A Noori-Zadeh (corresponding author), S

Bakhtiyari, A Khosravi. Acta Neurologica Belgica, 2018, 1-8.

Journal Impact Factor: 2.072

26- Association of mitochondrial dysfunction and lipid metabolism with type 2 diabetes

mellitus: A review of literature. K Haghani, P Asadi, G Taheripak, A Noori-Zadeh, S Darabi,

S Bakhtiyari. Frontiers in Biology, 1-12.

27- C/EBP homologous protein investigation in the serum and cerebro-spinal fluid of

relapsing-remitting multiple sclerosis patients. Masoumeh Karami, Mohammad Sajad Emami

Aleagha, Ali Seidkhani-Nahal, Salar Bakhtiyari, Ali Noori-Zadeh (corresponding author),

Mohammad Hossein Harirchian, Bahaadin Siroos, Mohammad Balood, Afra Khosravi. Journal

of Clinical Neuroscience, 2018 Nov 13. pii: S0967-5868(18)30517-4.

Journal Impact Factor: 1.640

28- Intra-articular ozone therapy efficiently attenuates pain in knee osteoarthritic subjects:

A systematic review and meta-analysis. A Noori-Zadeh, S Bakhtiyari, R Khooz, K Haghani, S

Darabi. Complementary Therapies in Medicine. 2018, Volume 42, 240-247.

Journal Impact Factor: 2.084

29- SMER28 Attenuates Dopaminergic Toxicity Mediated by 6-Hydroxydopamine in the

Rats via Modulating Oxidative Burdens and Autophagy-Related Parameters. Shahram

Darabi, Ali Noori-Zadeh, Farzad Rajaei, Hojjat Allah Abbaszadeh, Salar Bakhtiyari, Navid

Ahmady Roozbahany. Neurochemical research. 2018, 43 (12), 2313-2323.

Journal Impact Factor: 2.772

30- 17 β-Estradiol Oxidative Stress Attenuation and Autophagy-Induced Dopaminergic

Neuroprotection. R Varmazyar, A Noori-Zadeh, F Rajaei, S Darabi, S Bakhtiyari. Cell journal.

2019, 21 (1), 1-6.

Journal Impact Factor: 2.363

31- Leptin, adiponectin, and resistin blood adipokine levels in migraineurs: Systematic

reviews and meta-analyses. Milad Abbasi, Ali Noori-Zadeh(corresponding author), Ali

Seidkhani-Nahal, Mohammadreza Kaffashian, Salar Bakhtiyari, Sajad Panahi. Cephalalgia. 2019,

1-12.

Journal Impact Factor: 3.882

32- Trehalose neuroprotective effects on the substantia nigra dopaminergic cells by

activating autophagy and non-canonical Nrf2 pathways. Shahram Darabi; Ali Noori-Zadeh;

Hojjat-Allah Abbaszadeh; Farzad Rajaei; Salar Bakhtiyari. 2019, Iranian Journal of

Pharmaceutical Research.

Journal Impact Factor: 1.372

33- Trehalose neuroprotective effects on the substantia nigra dopaminergic cells by

activating autophagy and non-canonical Nrf2 pathways. Darabi S, Noori-Zadeh A,

Abbaszadeh H-A, Rajaei F and Bakhtiyari S. Iranian Journal of Pharmaceutical Research (2019)

(article in press)

Journal Impact Factor: 1.183

34- Shared Pathological Mechanisms Between Diabetes Mellitus and Neurodegenerative

Diseases. Nasrolahi, Ava, Javad Mahmoudi, Ali Noori-Zadeh, Karimeh Haghani, Salar

Bakhtiyari, and Shahram Darabi. Current Pharmacology Reports (2019): 1-13.

35- Dopaminergic Neuroprotection with Ginkgolide in 6-Hydroxydopamine Rat

Parkinson's Disease Model. Moghadam A, Noori-Zadeh A, Darabi S, Rajaei F, Abbaszadeh

H-a and Ghasemi Hamidabadi H. J-Mazand-Univ-Med-Sci (2019) 28: 11-21.

36- Evidence for hyperprolactinemia in migraineurs: a systematic review and meta-

analysis. Noori-Zadeh A, Karamkhani M, Seidkhani-Nahal A, Khosravi A, Darabi S.

Neurological Sciences. 2019 Aug 23:1-9.

Journal Impact Factor: 2.484

37- Elevated blood apelin levels in type 2 diabetes mellitus: A systematic review and meta-

analysis. Noori-Zadeh, A., Bakhtiyari, S., Khanjari, S., Haghani, K., Darabi, Diabetes Research

and Clinical Practice 148, 43-53

Journal Impact Factor: 3.239

38- Reply to comments on: Elevated blood apelin levels in type 2 diabetes mellitus: A

systematic review and meta-analysis. Noori-Zadeh A, Bakhtiyari S, 2019, Diabetes research

and clinical practice

Journal Impact Factor: 3.239

❖ Editorial member at:
❖ American Journal of Surgery and Clinical Case Reports
□ Journal Referee:
> Iranian journals
Journal of Ilam University of medical sciences
> International journals
/ 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
6- Neurological Sciences (NEUS)
7- Journal of Clinical Endocrinology & Metabolic Disorders
8- Multiple Sclerosis Journal - Experimental, Translational and Clinical
> Congress Referee:
□ 6th International Congress of Laboratory and Clinic
(ششمین کنگره بین المللی آزمایشگاه و بالین)
□7th Students Regional Congress of Ilam University of Medical Sciences

· Paper abstracts (presented as a poster in congress)

- 1. In vitro transfection of neural stem cells by pSectag2A-NT4 and evaluation of its expression. Sedigheh Mohammad Ghasemi, Taki Tiraihi, **Ali Nourizadeh**, Hadi kazemi. BCNC congress.
- 2. Evaluation of Non-Viral Gene Delivery to Bone Marrow Stem Cells. **Ali Nourizadeh**, Seyed A. Mesbah-Namin, Taki Tiraihi, Taher Taheri. Spinal cord injury congress. BCNC congress.
- 3. GDNF overexpression in transfected bone marrow stromal cells as a treatment method in spinal cord injury. Medicina genetic congress. **Ali Nourizadeh**, Seyed A. Mesbah-Namin, Taki Tiraihi, Taher Taheri.
- 4. E.poster [A-10-1209-1], Evaluation of NT3 gene expression in bone marrow stromal stem cell, Darabi Shahram, Tiraihi Taki, **Nourizadeh Ali.**
- 5. In vitro investigation of genes that control BMSC-derived neurosphere motility. **Ali Noori-Zadeh**, Ali gorji, Taki tiraihi.BCNC congress.
- 6. Lovastatin protects neural stem cells against H2O2-induced oxidative damage by inducing PGC-1α and Nrf2 gene expressions. Alireza Abdanipour, **Ali Noori-Zadeh**, Ramin Gosaili, Arezo Majdi. Road safety congress.
- 7. The Incidence of Traumatic Brain Injury: a review on incidence and cost in the world. **Ali Noori-Zadeh**, Peir Hossein Koulivand. Road safety congress.
- 8. Non-viral human proGDNF gene delivery to rat bone marrow stromal cells under ex vivo conditions. **Ali Noori-Zadeh**, Seyed Alireza Mesbah-Namin, Taki Tiraihi, Masoumeh Rajabibazld. Road safety congress.

- 9. In vitro investigation of genes which derive BMSC-derived neurosphere motility. **Ali Noori-Zadeh**, Ali gorji, Taki tiraihi, Seyed alireza mesbah-namin.
- 10. *FOXP3* gene expression status in the regulatory T cells of mouse model of multiple sclerosis (EAE). **Ali Noori-Zadeh**, 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. **Ali Noori-Zadeh**, 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.
- 2. 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.

- 3. 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.
- 5. 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.

☐ 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