

به نام خدا



۱- نام و نام خانوادگی: محمود براتی

۲- سن: ۳۶

۳- شماره تماس: ۰۲۱-۸۶۷۰۴۶۸۵

۴- سوابق تحصیلی:

محل تحصیل	سال	مدرک
دانشگاه علوم پزشکی اراک	۱۳۸۴	فوق دیپلم علوم آزمایشگاهی
دانشگاه علوم پزشکی شیراز	۱۳۸۷	کارشناسی علوم آزمایشگاهی
دانشگاه علوم پزشکی ایران	۱۳۸۹	کارشناسی ارشد بیوتکنولوژی پزشکی
دانشگاه علوم پزشکی شهید بهشتی	۱۳۹۵	Ph.D بیوتکنولوژی دارویی

مقالات:

1. **BARATI, M.**, FARAMARZI, M. A., NAFISSI-VARCHEH, N., KHOSHAYAND, M. R., HOUSHDAR TEHRANI, M. H., VAHIDI, H. & ADRANGI, S. 2016. L-Asparaginase Activity in Cell Lysates and Culture Media of Halophilic Bacterial Isolates. *Iranian Journal of Pharmaceutical Research*, 15, 435-440.
2. ASADI, E., NAJAFI, A., MOEINI, A., PIRJANI, R., HASSANZADEH, G., MIKAEILI, S., SALEHI, E., ADUTWUM, E., SOLEIMANI, **BARATI, M.**, & KHOSRAVI, F. 2017. Ovarian tissue culture in the presence of VEGF and fetuin stimulates follicle growth and steroidogenesis. *Journal of Endocrinology*, 232, 205-219.
3. **BARATI, M.**, TABARZAD, M., SAFARPOUR, H. & GHADERI, O. 2016b. Validation of a Simple and Rapid Method for Assessment of Intracellular Bacterial Asparaginase. *Iranian Journal of Pharmaceutical Sciences*, 12, 33-42.
4. RAHMANZADEH, R., EFTEKHARI, S., ARDAKANI, M.-R. K., RAHMANZADE, R., MEHRABI, S., **BARATI, M.** & JOGHATAEI, M. T. 2016. Effect of bumetanide, a selective NKCC1 inhibitor, on hallucinations of schizophrenic patients; a double-blind randomized clinical trial. *Schizophrenia Research*.
5. NOHESARA, S., GHADIRIVASFI, M., **BARATI, M.**, GHASEMZADEH, M. R., NARIMANI, S., MOUSAVI-BEHBAHANI, Z., JOGHATAEI, M., SOLEIMANI, M., TABAN, M. & MEHRABI, S. 2016. Methamphetamine-induced psychosis is associated with DNA hypomethylation and increased expression of AKT1 and key dopaminergic genes. *American Journal of Medical Genetics Part B: Neuropsychiatric Genetics*.
6. FARAJDOKHT, F., SOLEIMANI, M., MEHRPOUYA, S., **BARATI, M.** & NAHAVANDI, A. 2015. The role of hepcidin in chronic mild stress-induced depression. *Neuroscience letters*, 588, 120-124.
7. KHOJASTEH, F., NAHAVANDI, A., MEHRPOUYA, S., HOMBERG, J. R., MIRZAMOHAMMADI, S., RAUFI, S., SOLEIMANI, M. & **BARATI, M.** 2015. Cognitive impairment induced by permanent bilateral common carotid occlusion exacerbates depression-related behavioral, biochemical, immunological and neuronal markers. *Brain research*, 1596, 58-68.
8. MEHRPOUYA, S., NAHAVANDI, A., KHOJASTEH, F., SOLEIMANI, M., AHMADI, M. & **BARATI, M.** 2015. Iron administration prevents BDNF decrease and depressive-like behavior following chronic stress. *Brain research*, 1596, 79-87.
9. EFTEKHARI, S., MEHRABI, S., SOLEIMANI, M., HASSANZADEH, G., **BARATI, M.**, RAHMANZADEH, R., HADJIGHASSEM, M. R. & JOGHATAEI, M. T. 2014. bBDNF

- modifies hippocampal KCC2 and NKCC1 expression in a temporal lobe epilepsy model. *Acta Neurobiol Exp*, 74, 276-287.
10. ESMAEILZADE, B., NOBAKHT, M., HOSSEINI, S. M., MORTAZAVI, P., **BARATI, M.**, MEHRABI, S., HEJAZIAN, L. B. & GHOROGHI, F. M. 2014. Adult neurogenesis of epidermal neural crest stem cells (EPI-NCSC) in hippocampus of Alzheimer's rat model. *Comparative Clinical Pathology*, 23, 789-797.
11. GILANCHI, S., ESMAEILZADE, B., EIDI, A., **BARATI, M.**, MEHRABI, S., GHOROGHI, F. M. & NOBAKHT, M. 2014. Neuronal differentiation of rat hair follicle stem cells: the involvement of the neuroprotective factor Seladin-1 (DHCR24). *Iranian biomedical journal*, 18, 136.
12. SHAHIDI, M., **BARATI, M.**, HAYAT, P., TAVASOLI, B. & BAKHSHAYESH, M. 2014. The in vitro effects of sodium salicylate on von Willebrand factor and C-reactive protein production by endothelial cells. *Inflammopharmacology*, 22, 367-372. (ISI IF:2.304)
13. SOLEIMANI, M., JAMEIE, S. B., **BARATI, M.**, MEHDIZADEH, M. & KERDARI, M. 2014. Effects of Coenzyme Q10 on the ratio of TH1/TH2 in Experimental Autoimmune Encephalomyelitis Model of Multiple Sclerosis in C57BL/6. *Iranian biomedical journal*, 18, 203.
14. MOBINI, S., SOLATI-HASHJIN, M., PEIROVI, H., OSMAN, N. A. A., GHOLPOURMALEKABADI, M., **BARATI, M.** & SAMADIKUCHAKSARAEI, A. 2013. Bioactivity and biocompatibility studies on silk-based scaffold for bone tissue engineering. *J Med Biol Eng*, 33, 207-14.
15. KARGOZAR, S., LOTFIBAKHSHAIESH, N., AI, J., MOZAFARI, M., MILAN, P. B., HAMZEHLOU, S., **BARATI, M.**, BAINO, F., HILL, R. G. & JOGHATAEI, M. T. 2017. Strontium-and cobalt-substituted bioactive glasses seeded with human umbilical cord perivascular cells to promote bone regeneration via enhanced osteogenic and angiogenic activities. *Acta Biomaterialia*.
16. SHAHIDI, M., ESMAEILI, N., FARANOOSH, M., KAZEMI, A., BARATI, M. & ANSARINEJAD, N. 2017a. Endothelial tip cell formation induced by chronic lymphocytic leukemia plasma (JAK2 positivity amplified this effect). *Journal of Hematopathology*, 1-7.
17. SHAHIDI, M., JAFARI, S., BARATI, M., MAHDIPOUR, M. & GHOLAMI, M. S. 2017b. Predictive value of salivary microRNA-320a, vascular endothelial growth factor receptor 2, CRP and IL-6 in Oral lichen planus progression. *Inflammopharmacology*, 1-7.
18. SHIRAZI, A., GOLAB, F., SANADGOL, N., **BARATI, M.**, MOHAMMAD SALEHI, R., VAHABZADEH, G., SHADALUI, Z. & REZAEI ZARCHI, S. 2016. Evaluation of the Neurotrophic Factors in Animal Model of Myelin Destruction Induced by Cuprizone in C57bl/6 Mice. *The Neuroscience Journal of Shefaye Khatam*, 4, 47-54.

19. FARAJDOKHT, F., SOLEIMANI, M., MEHRPOUYA, S., **BARATI, M.** & NAHAVANDI, A. 2013. Effect of chronic mild stress on the expression of hepcidin gene in hippocampus of male rats. *Journal of Gorgan University of Medical Sciences*, 15, 42-46.
20. KATEBI, A., GOLAB, F., VAHABZADEH, G., SARVEAZAD, A., GOODARZI, N., FAZELIPOUR, S., **BARATI, M.** & SOLEIMANI, M. 2018. The Effects of Different Dose of Chronic Ritalin on the Brain of Prepubertal Female Balb/C Mice. *International Journal of Pediatrics*, 6, 7883-7892.
21. MEHDINEJADIANI, S., AMIDI, F., MEHDIZADEH, M., **BARATI, M.**, SAFDARIAN, L., AFLATOONIAN, R., ALYASIN, A., AGHAHOSSEINI, M., PAZHOHAN, A. & HAYAT, P. 2018. The effects of letrozole and clomiphene citrate on ligands expression of Wnt3, Wnt7a, and Wnt8b in proliferative endometrium of women with Polycystic ovarian syndrome. *Gynecological Endocrinology*, 1-6.
22. MEHDIPOUR, M., SHAHIDI, M., MANIFAR, S., JAFARI, S., ABBAS, F. M., **BARATI, M.**, MORTAZAVI, H., SHIRKHODA, M., FARZANEGAN, A. & RANKOHI, Z. E. 2018. Diagnostic and prognostic relevance of salivary microRNA-21,-125a,-31 and-200a levels in patients with oral lichen planus-a short report. *Cellular Oncology*, 41, 329-334.
23. MEHRABI, S., JANAHAMDI, M., JOGHATAIE, M. T., **BARATI, M.**, MARZBAN, M., HADJIGHASSEM, M. & FARAHMANDFAR, M. 2018a. Blockade of p75 Neurotrophin Receptor Reverses Irritability and Anxiety-Related Behaviors in a Rat Model of Status Epilepticus. *Iranian biomedical journal*, 22, 264-274.
24. MEHRABI, S., SANADGOL, N., **BARATI, M.**, SHAHBAZI, A., VAHABZADEH, G., BARZROUDI, M., SEIFI, M., GHOLIPOURMALEKABADI, M. & GOLAB, F. 2018b. Evaluation of metformin effects in the chronic phase of spontaneous seizures in pilocarpine model of temporal lobe epilepsy. *Metabolic brain disease*, 33, 107-114.
25. SAFARPOUR, H., SHAHMIRZAIE, M., REZAAE, E., **BARATI, M.**, SAFARNEJAD, M. R. & SHIRAZI, F. H. 2018. Isolation and Characterization of Novel Phage Displayed scFv Fragment for Human Tumor Necrosis Factor Alpha and Molecular Docking Analysis of Their Interactions (Spring 2018). *Iranian Journal of Pharmaceutical Research*.
26. SHARAFI, Z., **BARATI, M.**, KHOSHAYAND, M. R. & ADRANGI, S. 2017. Screening for Type II L-Asparaginases: Lessons from the Genus Halomonas. *Iranian journal of pharmaceutical research: IJPR*, 16, 1565.
27. AHANGARZADEH, S., KANAIFI, M. M., HOSSEINZADEH, S., MOKHTARZADEH, A., BARATI, M., RANJBARI, J. & TAYEBI, L. 2019. Bicyclic peptides: types, synthesis and applications. *Drug discovery today*.

28. BARATI, S., RAGERDI KASHANI, I., MORADI, F., TAHMASEBI, F., MEHRABI, S., BARATI, M. & JOGHATAEI, M. T. 2019. Mesenchymal stem cell mediated effects on microglial phenotype in cuprizone-induced demyelination model. *Journal of cellular biochemistry*.
29. DERAKHSHANI, A., KESHAVARZ, K., BANADKOKI, S. B., SHIRAZI, F. H., BARATI, M., FEREIDOUNI, M. & SAFARPOUR, H. 2019. Optimization of induction parameters, structure quality assessment by ATR-FTIR and in silico characterization of expressed recombinant polcalcin in three different strains of Escherichia coli. *International journal of biological macromolecules*, 138, 97-105.
30. KOUHSARI, E., DOURAGHI, M., BARATI, M., YASERI, H. F., TALEBI, M., ABBASIAN, S., MOQARABZADEH, V. & AMIRMOZAFARI, N. 2019. Rapid Simultaneous Molecular Stool-Based Detection of Toxigenic Clostridioides difficile by Quantitative TaqMan Real-Time PCR Assay. *Clinical laboratory*, 65.
31. MEHDINEJADIANI, S., AMIDI, F., MEHDIZADEH, M., BARATI, M., PAZHOHAN, A., ALYASIN, A., MEHDINEJADIANI, K. & SOBHANI, A. 2018. Effects of letrozole and clomiphene citrate on Wnt signaling pathway in endometrium of polycystic ovarian syndrome and healthy women. *Biology of reproduction*, 100, 641-648.
32. MEHRABI, S., NASIRINEZHAD, F., BARATI, M., ABUTALEB, N., BARATI, S., DERESHKY, B. T., AMINI, N., MILAN, P. B., JAHANMAHIN, A. & SARVEAZAD, A. 2019. The Effect of Alpha-Tocopherol on Morphine Tolerance-induced Expression of c-fos Proto-oncogene from a Biotechnological Perspective. *Recent patents on biotechnology*, 13, 137-148.
33. NADERI, N., HEMMATINAFAR, M., GAEINI, A. A., BAHRAMIAN, A., GHARDASHI-AFOUSI, A., KORDI, M. R., DARBANDI-AZAR, A., KARIMZADE, F., MOHEBBI, H. & BARATI, M. 2019. High-intensity interval training increase GATA4, CITED4 and c-Kit and decreases C/EBP in rats after myocardial infarction. *Life sciences*, 221, 319-326.
34. RABIEE, S., TAVAKOL, S., BARATI, M. & JOGHATAEI, M. T. 2019. Autophagic, apoptotic, and necrotic cancer cell fates triggered by acidic pH microenvironment. *Journal of cellular physiology*, 234, 12061-12069.
35. RAHMANZADEH, R., MEHRABI, S., BARATI, M., AHMADI, M., GOLAB, F., KAZMI, S., JOGHATAEI, M. T., SEIFI, M. & GHOLIPOURMALEKABADI, M. 2018. Effect of Co-administration of Bumetanide and Phenobarbital on Seizure Attacks in Temporal Lobe Epilepsy. *Basic and clinical neuroscience*, 9, 408.
36. RAMEZANPOUR, M., DAEI, P., TABARZAD, M., KHANAKI, K., ELMI, A. & BARATI, M. 2019. Preliminary study on the effect of nucleolin specific aptamer-miRNA let-7d chimera on Janus kinase-2 expression level and activity in gastric cancer (MKN-45) cells. *Molecular biology reports*, 46, 207-215.

کتاب‌ها:

- ❖ بیوتکنولوژی مولکولی - اصول و کاربرد DNA نوترکیب، نشر اشرافیه، شابک: 9789646772205
- ❖ تکنینک‌های پیشرفته مولکولی، نشر رویان پژوه، شابک: 9786004081658
- ❖ **DNA Electrophoresis Methods and Protocols** (In preparation)
- ❖ **Proteomics** (In preparation)

اختراعات:

1. 23 June 2017: **Barati M**, Ghanbari A., Automatic flame for biological hood. Patent No. 93650. Industrial Property General Office, Intellectual Property Office, State Organization for Registration of Deeds and Properties, Iran.
2. 3 June 2017: **Barati M**, Ghanbari A., Cooling box for molecular testing. Patent No. 93592. Industrial Property General Office, Intellectual Property Office, State Organization for Registration of Deeds and Properties, Iran.
3. Septamber 2018: **Barati M**, Golab F, Soleimani M. a microRNA detection kit with MGB free probe. Application No. 139750140003005755. Industrial Property General Office, Intellectual Property Office, State Organization for Registration of Deeds and Properties, Iran.

ثبت ژن:

1. Pseudomonas aeruginosa strain c2 protease PfpI (pfpi) gene, partial cds
Khalili Samani,M., Samadikuchaksaraei,A. and Barati,M.
537 bp linear DNA JQ768409.1 GI:385724698
2. Pseudomonas aeruginosa strain c17 protease PfpI (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JQ898574.1 GI:385300849
3. Pseudomonas aeruginosa strain C9 protease PfpI (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JQ780475.1 GI:385300845
4. Pseudomonas aeruginosa strain c13 protease PfpI (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JQ890208.1 GI:385300847
5. Pseudomonas aeruginosa strain C5 protease PfpI (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JQ769022.1 GI:385300843
6. Pseudomonas aeruginosa strain c1 protease PfpI (pfpi) gene, partial cds
Barati,M., Khalili Samani,M. and Samadikuchaksaraei,A.
522 bp linear DNA JQ423922.1 GI:381389721
7. Pseudomonas aeruginosa strain c30 protease (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JX435121.1 GI: 407356208
8. Pseudomonas aeruginosa strain c48 protease (pfpi) gene, complete cds
Samadikuchaksaraei,A., Khalili Samani,M. and Barati,M.
540 bp linear DNA JX435120.1 GI:407356205

کنگره‌ها:

Eastern Mediterranean Regional Congress of Microbiology. Gilan University of Medical Sciences. **Cloning and expression of human Lipocalin 2 in HEK293 cell line and its effect in preventing infections caused by Pseudomonas aeruginosa in burn wounds in Rattus Norvegicus.** (Poster presentation)

The first international Tehran burn congress. **PFPI gene mutations in Pseudomonas aeruginosa isolated from burn patients in the Motahari hospital.** (oral presentation)

Bakhshayesh, Masoomeh, Farhad Zaker, Merdad Heshemi, Majid Katebi, Mansooreh Soleimani, Mohsen Marzban, and Mahmood Barati. "**TGF-B1 MEDIATED APOPTOSIS IS ASSOCIATED TO MITOCHONDRIAL BCL-2 EXPRESSION IN LYMPHOMA CELL.**" In ASIA-PACIFIC JOURNAL OF CLINICAL ONCOLOGY, vol. 8, pp. 307-307. 111 RIVER ST, HOBOKEN 07030-5774, NJ USA: WILEY-BLACKWELL, 2012.

The Second international burn congress. **Pseudomonas aeruginosa: genotype and antibiotic resistance of isolates in a level I Iranian burn hospital.** (Oral presentation).

Hossein Jafari, Ali Yousefnejad, Soraya Mehrabi, Mahmood Barati, Roozbeh Farhoodi, Fereshteh Golab."**Computational Model for the Effects of Phenobarbital and the NKCC1 Inhibitor Bumetanide in the Pilocarpine Model of Temporal Lobe Epilepsy**". The Neuroscience Journal of Shefaye Khatam, 2015. 2(4): p. 70-70.

تدریس:

اقتصاد و مالکیت فکری در بیوتکنولوژی

مهندسی زنتیک

مهندسی پروتئین

اصول استاندارد سازی فراورده‌های بیولوژی

سیگنالینگ

ایمونوشیمی

PCR

کارگاه‌ها

Protein extraction and western blotting (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2011

RNA Extraction and Real Time PCR (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2011

Cord blood stem cells extraction and culture (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2011

PCR Primer Design (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2013

PubMed Searching (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2013

PubMed Searching (School of Pharmacy, Shahid Beheshti University of Medical Sciences) 2014

DNA Extraction and PCR (Iran University of Medical Sciences) 2014

PCR Primer Design (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2015

Bioinformatic (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2015

Primer Design for microRNA (Cellular and Molecular Research Center, Iran University of Medical Sciences) 2015

PCR Primer Design (Core Facility Laboratory, Iran University of Medical Sciences) 2017

PCR Primer Design (Core Facility Laboratory, Iran University of Medical Sciences) 2018

qPCR basics and analysis (Department of Physiology, Iran University of Medical Sciences) 2018

مهارت‌های تکنیکی:

1. Cell Culture and Primary Culture
2. PCR (Real time PCR, RT-PCR, Nested-PCR, RAPD-PCR, ARMS-PCR)
3. Western Blotting
4. Working experience with common laboratory animals
5. ELISA
6. Molecular cloning and genetic engineering
7. Bioinformatic
8. Chromatography and Protein purification
9. Conventional medical laboratory tests
10. PFGE (Pulse field gel electrophoresis)
11. Fermentation Optimization
12. Statistical Experimental Design

جوایز و افتخارات:

- ❖ رتبه ۴ کنکور کارشناسی علوم آزمایشگاهی سال ۱۳۸۴
- ❖ رتبه ۱ کنکور کارشناسی ارشد بیوتکنولوژی پزشکی سال ۱۳۸۷
- ❖ رتبه ۶ کنکور Ph.D بیوتکنولوژی دارویی سال ۱۳۸۹
- ❖ دانشجوی برتر رشته بیوتکنولوژی دارویی دانشگاه علوم پزشکی شهید بهشتی سال ۹۳-۹۴