

# Reza Badalzadeh

## Curriculum Vitae

### Personal Information

- **Date of Birth:** 24.05.1980
- **Place of birth:** Tabriz, Iran
- **Nationality:** Iranian
- **Work Address:** Department of Physiology,  
Tabriz University of Medical Sciences,  
Tabriz, Iran.
- **Position:** Associate Professor
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### Educations/Thesis

#### **PhD degree in Medical Physiology;**

Tabriz University of Medical Sciences, Tabriz-Iran.

**Title of PhD thesis:** "Interfering influence of diabetes with cardioprotection by postconditioning on ischemia/reperfusion injury and its cellular-molecular mechanisms", (Excellent rank; 20 out of 20).

#### **MSc degree in Medical Physiology;**

Baqiatollah University of Medical Sciences, Tehran-Iran.

**Title of MSc thesis:** "The effects of lead poisoning on electrical, mechanical and hemodynamical alterations of rat isolated heart and its responsiveness to catecholamines", (Excellent rank).

### دکتر رضا بدلزاده

دکترای تخصصی (PhD) فیزیولوژی پزشکی

دانشیار گروه فیزیولوژی، دانشکده پزشکی،

دانشگاه علوم پزشکی تبریز.

تماس: ۰۴۱۳۳۳۶۴۶۶۴

## جوایز و رتبه ها (به فارسی)

- ۱- دانشجوی نمونه کشوری و دریافت تقدیرنامه از دست ریاست جمهوری سال ۱۳۸۹
- ۲- کسب رتبه اول دانشجویان دوره آموزشی دکترای تخصصی دانشکده پزشکی تبریز (بامعدل کل ۲۰) در سالهای ۹۰-۱۳۸۷
- ۳- مسئول و مدرس برتر حیطه علوم پایه هشتمین، نهمین و دهمین المپیاد دانشجویان علوم پزشکی کشور سال ۹۷-۱۳۹۵
- ۴- مدرس برتر حیطه علوم پایه هفتمین المپیاد دانشجویان علوم پزشکی کشور سال ۱۳۹۴
- ۵- کسب عنوان استادیار جوان و برتر بنیاد ملی نخبگان و دریافت گرانت پژوهشی سال ۱۳۹۴
- ۶- کسب عنوان استادیار جوان و برتر وزارت بهداشت و دریافت گرانت پژوهشی سال ۱۳۹۳
- ۷- کسب عنوان محقق برتر و برنده جایزه استاد دکترگیتی انجمن فیزیولوژی و فارماکولوژی ایران سال ۱۳۸۸
- ۸- کسب رتبه برتر کتاب در جشنواره کتاب سال دانشجویی (برای ترجمه فیزیولوژی گانونگ) سال ۱۳۸۹
- ۹- کسب عنوان دانشجوی پژوهشگر برتر مقطع دکترای تخصصی دانشگاه علوم پزشکی تبریز سال ۱۳۸۹
- ۱۰- کسب عنوان محقق برتر دانشکده پزشکی دانشگاه علوم پزشکی تبریز سال ۱۳۸۸
- ۱۱- کسب رتبه اول محقق و پژوهشگر برتر جشنواره باشگاه پژوهشگران جوان سال ۱۳۸۷
- ۱۲- کسب رتبه اول طرح پژوهشی هشتمین جشنواره کشوری ممتازین، مبتکرین و نوآوران دانشجویان کشوری و دریافت تقدیرنامه از دست وزیر بهداشت سال ۱۳۸۸
- ۱۳- کسب رتبه دوم هفتمین و هشتمین جشنواره استانی ممتازین، مبتکرین و نوآوران دانشجویان آذربایجان شرقی سال ۸۸-۱۳۸۷
- ۱۴- کسب رتبه سوم مقاله در اولین همایش سراسری اندوتلیوم ایران-دانشگاه علوم پزشکی اصفهان سال ۱۳۸۸
- ۱۵- کسب رتبه دوم هفتمین جشنواره کشوری دانشجویان ممتاز، مبتکر و نوآور سراسر کشور و دریافت تقدیرنامه از دست وزیر بهداشت سال ۱۳۸۷
- ۱۶- کسب رتبه در آزمون دکتری تخصصی (PhD) فیزیولوژی وزارت بهداشت، درمان و آموزش پزشکی ایران سال ۱۳۸۶
- ۱۷- دانشجوی ممتاز در دوره کارشناسی دانشگاه علوم پزشکی سال ۱۳۸۰
- ۱۸- کسب رتبه های اول و دانش آموز ممتاز در کلیه مقاطع تحصیلی در دوره های مختلف مدرسه در تبریز سال ۷۷-۱۳۷۰

## Awards/Honors (in English)

1. 1<sup>st</sup> rank and Top Student of the Country and honored by the President of IR Iran, 2010.
2. 1<sup>st</sup> rank in educational period (average: 20 out of 20) among all PhD Students of Faculty of Medicine, Tabriz University of Medical Sciences, 2008-2010.
3. Top tutor and head of medical Olympiad department in Tabriz University of Medical Sciences, EDC, 2015-2018.
4. 1<sup>st</sup> rank in 8<sup>th</sup> medical Olympiads of University of Medical Sciences in Iran, 2016.
5. Earning young and top senior assistant professor title at the National Elite Foundation and receiving a research grant, 2015.
6. Earning top assistant professor title and receiving a research grant from Research deputy of Ministry of Health and Medical Education, 2015.
7. 1<sup>st</sup> rank Researcher and winner of Dr. Gity's Award of Iranian Society of Physiology and Pharmacology, Tehran-Iran, 2009.
8. 1<sup>st</sup> rank PhD-student Researcher in research festival of Tabriz University of Medical Sciences, Tabriz-Iran, 2010.

9. 1<sup>st</sup> rank PhD Researcher in research festival of Medical Faculty of Tabriz University of Medical Sciences, Tabriz-Iran, 2009.
10. 1<sup>st</sup> rank for Book Translation in the National Year's Book festival, Tehran-Iran, 2010.
11. 1<sup>st</sup> rank researcher in Young Researchers' Club festival, Tabriz-Iran, 2008.
12. 1<sup>st</sup> rank for the Best Research Project in 8<sup>th</sup> festival of Iranian elite and innovator students of country and honored by the Minister of Health, Tehran-Iran, 2009.
13. 2<sup>nd</sup> rank for the Best Article in 7<sup>th</sup> festival of Iranian elite and innovator students in the country and honored by the Minister of Health, Tehran-Iran, 2008.
14. 3<sup>rd</sup> rank for the Best Article in 7<sup>th</sup> festival of elite and innovator students in East Azerbaijan Province, Tabriz-Iran 2008.
15. 3<sup>rd</sup> rank for the Best Article in first national congress on Endothelium, Isfahan University of Medical Sciences, Isfahan-Iran, 2009.
16. 3<sup>rd</sup> rank in PhD-Entrance Exam of Ministry of Health, Iran, 2007.
17. High rank student in High-School and University Careers, 1992-2011.

## **Memberships**

1. Iranian Society for Physiology and Pharmacology, from 2002 to present.
2. Iranian Young Researchers Club, from 2007 to 2012.
3. Iranian smart and talented students' office in Tabriz University of Medical Sciences from 2008 to 2011.
4. National foundation for Iranian elite and talented people from 2009 to present.
5. Iranian Society for Herbal Medicine, from 2009 to present.
6. Member of academic board in Tabriz University of Medical Sciences from 2006 to 2008.
7. Committee member of education evaluation development in Tabriz University of Medical Sciences from 2012 to 2014.
8. Committee member in "Molecular Medicine Research Center" in Tabriz University of Medical Sciences from 2016- up now.
9. ....

## **Work Experiences and Activities**

1. Academic Member in Department of Physiology, Faculty of Medicine, Tabriz University of Medical Science, Iran, 2006-2008.
2. Academic Member in Department of Physiology, Faculty of Medicine, Tabriz University of Medical Science, Iran, 2010 up now.

3. Executive co-operator in 16<sup>th</sup> Iranian congress of physiology and pharmacology, Tarbiat-Modarres University, Tehran-Iran, 2003.
4. Executive and Scientific Committee Member in 21<sup>th</sup> Iranian congress of physiology and pharmacology, Tabriz University of Medical Sciences, Tabriz-Iran, 2013.
5. Coordinator-manager of Journal Clubs meetings in Department of Physiology, Tabriz University of Medical Sciences, Tabriz-Iran, 2011-2016.
6. Head of Medical Student Olympiads in “Scientific Thinking in Basic Science” in Tabriz University of Medical Sciences for three consecutive periods, Tabriz-Iran, 2015-up now.
7. Head, in charge of “Professor's Evaluation Department” in EDC of Tabriz University of Medical Sciences, Tabriz-Iran, 2015-up now.

## **Research Experiences and Skills**

1. Isolated perfused heart in Langendorff set-up
2. Electrophysiological recording techniques such as voltage- and patch-clamp
3. Organ bath perfusion of isolated tissues
4. Myocardial infarction induction models in rat
5. Ischemia-reperfusion injury of the heart and brain
6. Stem cell implantation into ischemic myocardium
7. Research methodology and scientific writing
8. Mitochondrial staining methods
9. ECL western blot and immunoblotting
10. Electrophoresis
11. ELISA
12. ...

## **Innovatory Activities**

1. Constructing and assembling the research set-up of Langendorff Isolated Heart for small animals in Department of Physiology, Tabriz University of Medical Sciences, Iran, 2008.
2. Equipping the isolated tissue laboratory of Department of Physiology, Tabriz University of Medical Sciences, Iran, 2007.
3. Designing and equipping the laboratory of Cardiovascular Physiology in Department of Physiology, Tabriz University of Medical Sciences, Iran, 2011.
4. Setting up the biological signals recording systems in research, including Electrocardiography, Spirometry, Nerve and muscle functions recording, Organ bath, and Intra-arterial blood pressure measurement in Medical Faculty of Islamic Azad University of Tabriz Branch, Iran, 2012.
5. Constructing and assembling the research set-up of Langendorff Isolated Heart for small animals in Department of Physiology, Baqiatollah University of Medical Sciences, Iran, 2006.

## **Teaching Experiences**

1. Teaching all fields of Medical Physiology (theory and applied courses) in Tabriz University of Medical Sciences and in its International branch (Aras), Iran, to the following students and levels:  
PhD level and residents: PhD students of Physiology, residents of Dentistry  
Doctoral level: students of Medicine, Dentistry, and Pharmacy;  
MSc level: Master students of Physiology, Biophysics, Nursing, Biochemistry....  
Bachelor level: students of faculty of Nursing and Midwifery; students of faculty of Nutrition and Health; students of faculty of Rehabilitation; students of faculty of Paramedicine and Laboratory Sciences.
2. Teaching all fields of Physiology (theory and applied courses) in Tarbiat Moallem University of Azarbaijan, Iran, to BSc Biology students.
3. Teaching all fields of Medical Physiology (theory and applied courses) in Islamic Azad University of Tabriz to students of Medicine, Nursing, Midwifery and Laboratory Sciences:
4. Teaching all fields of Physiology (theory and applied courses) in Azad University of Tabriz and Maragheh branches.
5. Teaching applied courses of Medical Physiology for medical students in Baqiatollah University of Medical Sciences, Tehran-Iran.
6. Teaching “Research Methodology and Scientific Writing” in Tabriz University of Medical Sciences.
7. Teaching the course “Database Searching” as scientific workshop for medical students.
8. Teaching the course “Laboratory Animals in Research” for medical students in workshop and summer school.
9. Teaching the course “Western Blotting” as serial scientific workshops.
10. Teaching the course “Concept Map” as serial scientific workshops in medical Olympiads.

## **Publications**

### **1. Books**

1. Translating the 23<sup>rd</sup> edition of "**Ganong's Review of Medical Physiology**" to Persian, Jahan-Adib Publications, Tehran-Iran, 2010.
2. Summarizing the "**Medical Physiology**" in Persian, Andisheh Rafie Publications, Tehran-Iran, 2012.
3. Translating the 24<sup>rd</sup> edition of "**Ganong's Review of Medical Physiology**", Jahan-Adib and Sina-Teb Publications, Tehran-Iran, 2012.
4. Writing the "**Essentials of Medical Physiology**" in Persian, Golban Publications, Tehran-Iran, 2008.

5. Editing the first edition of "**Clinical Biochemistry and Diagnostic Methods**", Chargoon Publications, Tehran-Iran, 2012.
6. Editing the first edition of "**Concept Map**", Tabriz Medical University Publications, Tabriz-Iran, 2013.

## **2. Articles in International Journals**

1. G Bayrami, P Karimi, F Agha-Hosseini, S Feyzizadeh, **R Badalzadeh\*** (2018). Effect of Ischemic Postconditioning on Myocardial Function and Infarct Size Following Reperfusion Injury in Diabetic Rats Pretreated With Vildagliptin. *Journal of Cardiovascular Pharmacology and Therapeutics*. 23 (2), 174-183.
2. M Najafi, E Noroozi, A Javadi, **R Badalzadeh\*** (2018). Anti-arrhythmogenic and anti-inflammatory effects of troxerutin in ischemia/reperfusion injury of diabetic myocardium. *Biomedicine & Pharmacotherapy*. 102, 385-391.
3. S Feyzizadeh, **R Badalzadeh\*** (2017). Application of ischemic postconditioning's algorithms in tissues protection: response to methodological gaps in preclinical and clinical studies. *Journal of Cellular and Molecular Medicine*. 21 (10), 2257-2267.
4. **Reza Badalzadeh**, Seyed Mahmoud Tabatabaei, Mustafa Mohammadi, Arash Khaki, Dariush Mohammadnezhad (2018). Combined postconditioning with ischemia and cyclosporine-A restore oxidative stress and histopathological changes in reperfusion injury of diabetic myocardium. *Iranian Journal of Basic Medical Sciences*. 20 (10), 1079-87.
5. Feyzizadeh S, **Badalzadeh R\*** (2017). Application of ischemic postconditioning's algorithms in tissues protection: response to methodological gaps in preclinical and clinical studies. *J Cell Mol Med*. 21(10):2257-2267.
6. **R Badalzadeh**, L Chodari, V Ghorbanzadeh (2017). Troxerutin, a bioflavonoid, improves oxidative stress in blood of streptozotocin-induced type-1 diabetic rats. *Iranian Journal of Pharmaceutical Sciences*. 13 (2), 75-86.
7. B Yousefi, A Azimi, M Majidinia, V Shafiei-Irannejad, **R Badalzadeh**, N Samadi, N Zarghami, B Baradaran (2017). Balaglitazone reverses P-glycoprotein-mediated multidrug resistance via upregulation of PTEN in a PPAR $\gamma$ -dependent manner in leukemia cells. *Tumor Biology*. 39 (10), 1010428317716501.
8. F Aghahoseini, **R Badalzadeh\*** (2017). Diabetes and oxidative stress: Dipeptidyl peptidase-4 inhibitors. *International Journal of Advanced Biotechnology and Research* 8 (4), 486-498.
9. Lotfollahi H, Mohammadi M, Ghaffari S, **Badalzadeh R**, Sohrabi B, Aslanabadi N, Separham A, Golmohammadi A, Abbasnejad A, Roshani M (2016). Effect of remote ischemic post-conditioning on oxidative stress in blood of STEMI patients treated with primary angioplasty. *J Cardiovasc Thorac Res*. 8(3):113-118.

10. Ghiasi R, Mohammadi M, Majidinia M, Yousefi B, Ghiasi A, **Badalzadeh R\*** (2016). The effects of mebudipine on myocardial arrhythmia induced by ischemia-reperfusion injury in isolated rat heart. *Cell Mol Biol (Noisy-le-Grand, France)* 62 (13), 15-20.
11. **Badalzadeh R**, Azimi A, Alihemmati A, Yousefi B (2017). Chronic type-I diabetes could not impede the anti-inflammatory and antiapoptotic effects of combined postconditioning with ischemia and cyclosporine A in myocardial reperfusion injury. *J Physiol Biochem*; 73(1), 111–120.
12. **Badalzadeh R**, Baradaran B, Alihemmati A, Yousefi B, Abbaszadeh A (2016). Troxerutin Preconditioning and Ischemic Postconditioning Modulate Inflammatory Response after Myocardial Ischemia/Reperfusion Injury in Rat Model. *Inflammation*; 40(1):136-143.
13. Safaei N, Sheikhalizadeh MA, **Badalzadeh R\*** (2016). Effect of ischemic postconditioning on myocardial protection in patients undergoing coronary artery bypass grafting surgery with cardiopulmonary bypass. *J Cardiovasc Thorac Res*; 8(2):65-71.
14. Mokhtari B, **Badalzadeh R\***, Alihemmati A, Mohammadi M (2015). Phosphorylation of GSK-3 $\beta$  and reduction of apoptosis as targets of troxerutin effect on reperfusion injury of diabetic myocardium. *Eur J Pharmacol*; 765:316-321.
15. Tabatabaei SM, **Badalzadeh R\***, Mohammadnezhad GR, Balaei R (2015). Effects of Cinnamon extract on biochemical enzymes, TNF- $\alpha$  and NF- $\kappa$ B gene expression levels in liver of broiler chickens inoculated with *Escherichia coli*. *Pesquisa Veterinária Brasileira*, 35(9):781-787.
16. **Badalzadeh R**, Mokhtari B, Yavari R (2015). Contribution of apoptosis in myocardial reperfusion injury and loss of cardioprotection in diabetes mellitus. *J Physiol Sci*; 65(3):201-15.
17. **Badalzadeh R**, Yavari R, Chalabiani D (2015). Mitochondrial ATP-sensitive K<sup>+</sup> channels mediate the antioxidative influence of diosgenin on myocardial reperfusion injury in rat hearts. *Gen Physiol Biophys*; 34(3):323-9.
18. **Badalzadeh R**, Layeghzadeh N, Alihemmati A, Mohammadi M (2015). Beneficial effect of troxerutin on diabetes-induced vascular damages in rat aorta: histopathological alterations and antioxidation mechanism. *Int J Endocrinol Metab*; 13(2):e25969.
19. Naderi R, Mohaddes G, Mohammadi M, Alihemmati A, **Badalzadeh R**, Ghaznavi R, Ghyasi R, Mohammadi Sh (2015). Preventive effects of garlic (*Allium sativum*) on oxidative stress and histopathology of cardiac tissue in streptozotocin-induced diabetic rats. *Acta Physiol Hung*, 102(4):380-90.
20. Asadi H, Abolfathi A, **Badalzadeh R**, Majidinia M, Yaghoubi A, Asadi M, Yousefi B (2015). Effects of Ramadan Fasting on Serum Amyloid A and Protein Carbonyl Group Levels in Patients with Cardiovascular Diseases. *J Cardiovasc Thorac Res*; 7(2):55-9.
21. Tabatabaei SM, **Badalzadeh R\***, Mohammadnezhad GR, Yousefi B (2015). Effects of Cinnamon extract on hepatic COX-2 gene expression and serum lipid profile in broiler

chickens inoculated with *Escherichia coli*. *Clinical Pathology Veterinary Journal (Iran)*, 9(1):61-72.

22. **Badalzadeh R**, Yousefi B, Tajaddini A, Ahmadian N (2014). Diosgenin-induced protection against myocardial ischaemia-reperfusion injury is mediated by mitochondrial K-ATP channels in a rat model. *Perfusion*; 30(7):565-71.
23. **Badalzadeh Reza**, Mohammadi Mustafa, Faranjia Safar, Najafi Moslem (2015). Involvement of Glycogen Synthase Kinase-3 $\beta$  and Oxidation Status in the Loss of Cardioprotection by Postconditioning in Chronic Diabetic Male Rats. *Advanced Pharmaceutical Bulletin*; 5(3), 321-327.
24. Ebrahimi Hadi, **Badalzadeh Reza\***, Mohammadi Mustafa, Yousefi Bahman (2014). Diosgenin attenuates inflammatory response induced by myocardial reperfusion injury: role of mitochondrial ATP-sensitive potassium channels. *Journal of Physiology and Biochemistry*; 64:393–400.
25. **Reza Badalzadeh**, Mustafa Mohammadi, Moslem Najafi, Naser Ahmadiasl (2014). Inhibition of mitochondrial permeability transition pore restores cardioprotective effect of ischemic postconditioning against ischemia/reperfusion injury in diabetic rats. *Journal of Diabetes and Metabolic Disorders*; 13(1):106.
26. Dehghan G, Shaghghi M, Jafari A, Mohammadi M, **Badalzadeh R** (2014). Effect of endurance training and cinnamon supplementation on post-exercise oxidative responses in rats. *Mol Biol Res Com* 2014; 3(4):269-281.
27. Yousefi B, Faghfoori Z, Samadi N, Karami H, Ahmadi Y, **Badalzadeh R** (2014). The effects of Ramadan fasting on endothelial function in patients with cardiovascular diseases. *European Journal of Clinical Nutrition*; 68: 835-839.
28. **Reza Badalzadeh**, Bahman Yousefi, Maryam Majidinia, Hadi Ebrahimi (2014). Anti-arrhythmic effect of diosgenin in reperfusion-induced myocardial injury in a rat model: activation of nitric oxide system and mitochondrial K-ATP channel. *Journal of Physiological Sciences*; 64:393–400.
29. **Reza Badalzadeh**, Mehrnoush Shaghghi, Mustafa Mohammadi, Gholamreza Dehghan, Zeynab Mohammadi (2014). Effect of Cinnamon Extract and Long-Term Aerobic Training on Heart Function, Biochemical Alterations and Lipid Profile Following Exhaustive Exercise in Male Rats. *Advanced Pharmaceutical Bulletin*; 4(Suppl 2): 515–520.
30. **Badalzadeh R**, Abbaszadeh A, Oryan S, Heydarzadeh F (2014). The Effect of Postconditioning on Inflammatory Response Induced by Myocardial Ischemia-Reperfusion Injury in Rat. *Journal of Babol University of Medical Sciences*; 16(9):43-47.
31. Heidarzadeh F, **Badalzadeh R\***, Hatami H (2014). The effect of troxerutin on lipid peroxidation and tissue injury induced by myocardial ischemia reperfusion injury in diabetic rat. *Razi Journal of Medical Sciences*; 21(125):37-45.



32. **Badalzadeh R**, Kohansal MH, Yousefi B (2014). Effects of the Islamic fasting on the health. *Islam and Health Journal*; 1(2): 27-31.
33. Rafigheh Ghyasi, Gholamreza Sepehri, Mustafa Mohammadi, **Reza Badalzadeh**, Akbar Ghyasi (2013). Effect of mebudipine on oxidative stress and lipid peroxidation in myocardial ischemic-reperfusion injury in male rat. *Journal of Research in Medical Sciences*; 11: 1150-1155.
34. **Reza Badalzadeh**, Mustafa Mohammadi, Moslem Najafi, Naser Ahmadiasl, Safar Farajnia, Hadi Ebrahimi (2012). The additive effects of ischemic postconditioning and cyclosporine-A on nitric oxide activity and functions of diabetic myocardium injured by ischemia/reperfusion. *Journal of Cardiovascular Pharmacology and Therapeutics*; 17(2): 181-189.
35. **Badalzadeh R**, Mohammadi M, Najafi M, Yousefi B (2012). Chronic diabetes abolishes cyclosporine-A induced cardioprotection and nitric oxide production in rat myocardium. *Research in Pharmaceutical Sciences*, 2012; 7(5), S1002.
36. Yousefi B, Darabi M, Khaniani M, Baradaran B, **Badalzadeh R** (2012). Up-regulation of stearyl-CoA and  $\delta 6$ -desaturase expression following MEK/ERK inhibition alters the fatty acid composition of HepG2 human hepatic cell line. *Research in Pharmaceutical Sciences*, 2012; 7(5), S87.
37. **Badalzadeh R**, Mohammadi M, Najafi M (2011). Diabetes mellitus abolishes the cardioprotective effect of ischemic postconditioning against ischemia/reperfusion injury in rat: role of lipid peroxidation. *Clinical Biochemistry*, 44(13), doi:10.1016/j.clinbiochem.2011.08.128.
38. Jeddi S, Ahmmadi Asl N, Mohammadi M, **Badalzadeh R** (2011). The hemodynamic effect of HEMADO on ischemic-reperfusion injury of male rat isolated heart. *Pharmaceutical Sciences*, 17(3): 145-150.
39. Jeddi S, Ahmmadiasl N, Mohammadi M, **Badalzadeh R** (2011). Effect of HEMADO on the changes of nitric oxide and coronary flow in isolated hearts of male rats. *Pharmaceutical Sciences*, 17(4): 267- 274.
40. Rashidi B, Mohammadi M, Mirzaei F, **Badalzadeh R**, Reisi P (2011). Amlodipine treatment decreases plasma and carotid artery tissue levels of endothelin-1 in atherosclerotic rabbits. *Pathophysiology*; 18(2): 137-142.
41. Mohammadi M, Afshin S, Mohaddes G, **Badalzadeh R** (2011). Protective Effect of Diosgenin and Exercise Training on Biochemical and ECG Alteration in Isoproterenol-Induced Myocardial Infarction in Rats. *Iranian Journal of Basic Medical Sciences*; 14(3): 264-274.
42. Ghiasi R, Mohammadi M, **Badalzadeh R**, Rashidi B, Sepehri G (2011). The Effect of mebudipine on cardiac functions and activity of myocardial nitric oxide system in ischemia-reperfusion injury in rat. *Cardiovascular Journal of Africa*; 22: 319–323.

43. Dehghan Gh, Ebrahimi S, Shaghghi M, Jafari A, Mohammadi M, **Badalzadeh R**, Fallah S (2011). Antioxidant Effect of Cinnamon Bark Extract following an Exhaustive Exercise in Male Rats. *Journal of Babol University of Medical Sciences*; 13(5): 21-28.
44. Bonyadi MR, **Badalzadeh R**, Mohammadi M, Poozesh SH, Salehi I (2010). The effect of regular training on plasma cytokines response in rats with type-1 diabetes. *Saudi Medical Journal*; 30(11); 1390-1394.
45. Bonyadi MR, Barzegar M, **Badalzadeh R**, Hashemilar M (2010). Detection of serum levels of anti-ganglioside antibodies in children with Guillain-Barre syndrome via immunoblotting and comparison with ELISA. *Iranian Journal of Immunology*; 7(2): 117-123.
46. Amani M, Noroozadeh A, **Badalzadeh R**, Khoshbaten A (2010). Effect of ascorbic acid supplementation on nitric oxide metabolites and systolic blood pressure in rats exposed to lead. *Indian Journal of Pharmacology*; 42(2): 77-80.
47. **Badalzadeh R**, Norouzzadeh A, Mohammadi M, Asgari A, Khoshbaten A (2009). Cardiac responsiveness to beta-adrenergics in rats with lead-induced hypertension. *Biology and Medicine*; 1(4); 75-81.
48. Bonyadi MR, **Badalzadeh R**, Pouzesh SH, Salehi I, Mohammadi M (2009). Regular swimming exercise affects on pre- and anti-inflammatory cytokines in healthy and diabetic rats. *Journal of Tabriz Medical Faculty*; 32(2): 19-24 [in Persian].
49. **Badalzadeh R**, Norouzzadeh A, Heydari A, Asgari, Khoshbaten A (2008). Effects of low-level of lead exposure on blood pressure and function of the rat isolated heart. *Indian Journal of Pharmacology*; 40(2): 69-72.
50. Khamnei S, Tabatabaei J, **Badalzadeh R**, Seikhzadegan M, Hanifi H (2009). Religious slaughtering from the science and ethical view of points. *Journal of Quran-Shenasi*; [in Persian].
51. Afshin S, Mohammadi M, Vatankhah A, **Badalzadeh R**, Mohaddes G, Rashidi B (2008). The effect of treadmill exercise and diosgenin on biochemical alterations by isoproterenol-induced cardiomyopathy in rats. *Pharmaceutical Sciences*; 15(1):23-30.
52. Ghiasi R, Mohammadi M, **Badalzadeh R**, Sepehri GR, Rashidi B (2008). Effect of mebudipine on hemodynamical and histological alterations in myocardial ischemia-reperfusion injury in rat. *Pharmaceutical Sciences*; 15(3): 247-256.
53. Mohammadi M, Mirzaei F, **Badalzadeh R** (2007). Effect of amlodipine on blood and aortic tissue concentration of endothelin in male rabbits receiving atherogenic diet. *Indian Journal of Pharmacology*; 39(6); 276-280.
54. **Badalzadeh R**, Norouzzade A, Asgari A, Khoshbaten A (2007). Effect of exposure to low level of lead acetate on isolated heart response to catecholamines. *Journal of Tehran Medical Faculty*; 65 (10); 17-22 [in Persian].

55. Salehi I, Mohammadi M, Farajnia S, **Badalzadeh R**, Vatankhah A (2006). Effect of swimming exercise on oxidative stress and atherogenic index in blood of diabetic rats. *Journal of Hamadan Medical University*; 14(3): 29-35 [in Persian].
56. Heydari A, Norouzzadeh A, Khoshbaten A, Asgari AR, Ghasemi A, Najafi S, **Badalzadeh R** (2006). Effects of short-term and subchronic lead poisoning on nitric oxide metabolites and vascular responsiveness in rat. *Toxicology Letters*; 166: 88–94.
- 57.

### **3. Articles Presented in Seminars and Congresses**

1. **Badalzadeh R**, Norouzzadeh A, Asgari A, Khoshbaten A (2005). The effect of lead poisoning on electrical, mechanical and hemodynamical changes of rat isolated heart. 3<sup>rd</sup> National Congress on Military Medicine, Tehran-Iran.
2. **Badalzadeh R**, Mirzaei F, Mohammadi M, Rashidi B (2007). Amlodipine effects on histological alterations of aortic, renal and carotid arteries of rabbits receiving atherogenic regimen. 18<sup>th</sup> Congress of Physiology and Pharmacology, Mashhad-Iran.
3. Norouzzadeh A, **Badalzadeh R**, Asgari AR, Khoshbaten A (2007). Effect of lead poisoning on responsiveness of rat heart to catecholamines. 18<sup>th</sup> Congress of Physiology and Pharmacology, Mashhad-Iran.
4. **Badalzadeh R**, Mohammadi M, Esmaeili M, Alaei H (2004). Steroid alkaloids extracted from olive leave reduce ischemic injury of brain. 17<sup>th</sup> Congress of Physiology and Pharmacology, Keramn-Iran.
5. Mohammadi M, Abedinzadeh M, Ahmadiasl N, Khamnei S, **Badalzadeh R** (2004). Respiratory volumes in young Iranian. 17<sup>th</sup> Congress of Physiology and Pharmacology, Kerman-Iran.
6. Khoshbaten A, Norouzzadeh A, **Badalzadeh R**, Heydari A (2004). Lead induced hypertension. 17<sup>th</sup> Congress of Physiology and Pharmacology, Kerman-Iran.
7. Salehi I, **Badalzadeh R**, Mohammadi M, Ghadiri F, Farajnia S (2006). The effects of swimming and treadmill exercises on apoptosis level in rat hippocampus. 7<sup>th</sup> National Conference of Physical Training and Exercise Sciences, Tabriz-Iran.
8. Naghinezhad A, **Badalzadeh R**, Mohaddes G (2007). Effects of avoid of drinking water and liquids during food eating on gastrointestinal disorders. 18<sup>th</sup> Congress of Physiology and Pharmacology, Mashhad-Iran.
9. Bannazadeh H, Rahmati M, Ahmadian N, **Badalzadeh R**, Yahyavi Y (2008). Evaluating the antibacterial effects of *Stachys* extracts. First Research Congress of Ardebil University of Medical Students, Ardebil-Iran.

10. **Badalzadeh R**, Bannazadeh H, Afshin S, Mohammadi M (2008). Effect of diosgenin on antioxidant capacity and lipid peroxidation after exercise in rat. 6<sup>th</sup> Research Congress of Yasudj University of Medical Students, Yasudj-Iran.
11. Bannazadeh H, **Badalzadeh R**, Rahmati M (2008). Study of antibacterial effects of the *Saliva Sahendica* extracts on some pathogenic bacteria. 6<sup>th</sup> Research Congress of Yasudj University of Medical Students, Yasudj-Iran.
12. Afshin S, Mohammadi M, Alvandian E, **Badalzadeh R**, Mohaddes G, Rashidi B (2008). Role of Treadmill Exercise and Diosgenin on Biochemical Alterations and ECG Pattern in Isoproterenol-Induced Myocardial Infarction in Rats. 11<sup>th</sup> Asian Federation of Sports Medicine Congress, Iran-Tehran.
13. **Badalzadeh R**, Afshin S, Mohammadi M (2008). Effect of plant derived diosgenin on biochemical alterations in myocardial injury induced by isoproterenol. First National Congress of Herbal Medicine, Golestan-Iran.
14. **Badalzadeh R**, Mohammadi M and Ghiasi R (2009). Cardioprotective effect of mebudipine, a new dihydropyridine calcium channel blocker in ischemia-reperfusion injury in rats. 36<sup>th</sup> Congress of the International Union of Physiological Sciences, Kyoto-Japan.
15. Mohammadi M, Mirzaei F, **Badalzadeh R** (2009). Effects of amlodipine on endothelin-1 levels in three types of isolated arteries of rabbits receiving atherogenic diet. 36<sup>th</sup> Congress of the International Union of Physiological Sciences, Kyoto-Japan.
16. Khmanei S, **Badalzadeh R**, Rajabi H (2009). Vision and hearing during dying: Quran story and medical documents. Quran and Medicine Congress, Yazd-Iran.
17. **Badalzadeh R**, Khamnei S, Tabatabaei SJ (2009). Importance of Islamic slaughtering and its comparison with western methods. Quran and Medicine Congress, Yazd-Iran.
18. **Badalzadeh R**, Ghiasi R, Mohammadi M (2009). Effect of mebudipine on myocardial nitric oxide system in ischemia-reperfusion injury. First National Congress of Endothelium, Isfahan-Iran.
19. Ghiasi R, Mohammadi M, **Badalzadeh R**, Sepehri GH, Rashidi B (2009). Influence of mebudipine on histological alterations following ischemia-reperfusion injury in rat. First National Congress of Endothelium, Isfahan-Iran.
20. **Badalzadeh R**, Ghiasi R, Mohammadi M, Sepehri GR (2009). Effect of mebudipine on hemodynamical functions of isolated heart during ischemia-reperfusion insult. 10<sup>th</sup> International Research Congress of Medical Students, Tehran-Iran.
21. Mohammadi M, Mirzaei F, Rashidi B, **Badalzadeh R** (2009). Effect of amlodipine on concentration of endothelin-1 in renal artery of rabbits receiving atherogenic regimen. First National Congress of Endothelium, Isfahan-Iran.
22. **Badalzadeh Reza**, Mohammadi Mustafa, Ghiyasi Rafiqeh, Sepehri Ghoramreza, Shoarian Ziba (2009). The effect of mebudipine on electrical activity and myocardial

arrhythmias in isolated rat heart injured by ischemia-reperfusion. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Shahid Beheshti University of Medical Sciences, Tehran-Iran.

23. Mustafa Mohammadi, Salimeh Afshin, **Reza Badalzadeh**, Gisou Mohhaddes, Amir Monsor Vatankhah (2009). Effect of exercise on lipid peroxidation and oxidative stress in isoproterenol-induced cardio injury in male rats. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
24. Rafiqeh Ghyasi, Mustafa Mohammadi, **Reza Badalzadeh**, Amir Monsor Vatankhah , Hadi Ibrahimi, Ali Naghinazhad (2009). Evaluating the effect of mebudipine on stress oxidative and antioxidant defense in myocardial ischemic-reperfusion injury in male rat. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
25. Mirzaei F, Afshin S, Mohammadi M, **Badalzadeh R**, Rashidi B, Mohaddes G (2009). Protective effect of treadmill exercise on lipid peroxidation and histological changes in isoproterenol-induced myocardial injury. 19<sup>th</sup> Iranian Congress of Physiology and Pharmacology, Shahid Beheshti University of Medical Sciences, Tehran-Iran.
26. Mohamad Rahmati, Hosein Bannazadeh, Davood Fazli, Yousef Rasmi, **Reza Badalzadeh** (2009). Long fasting dependent changes in the serum levels of cholesterol, triglyceride, HDL-C, LDL-C, estrogen and progesterone in young women during Ramadan. *J. Iran. Chem. Soc., Vol. 6, Suppl., S20-S72*. 10<sup>th</sup> Iranian Congress of Biochemistry & 3<sup>rd</sup> International Congress of Biochemistry and Molecular Biology, Tehran-Iran.
27. **Reza Badalzadeh**, Mustafa Mohammadi, Rafiqeh Ghiyasi, Ali Abdi (2010). Anti-Arrhythmic Effect of Mebudipine in Isolated Rat Heart Injured by Ischemia-Reperfusion. 26<sup>th</sup> Congress of Cardiology, Istanbul-Turkey.
28. Mustafa Mohammadi, Iraj Salehi, Fariba Mirzaei, **Reza Badalzadeh** (2010). Effect of Amlodipine on Heart Tissue Concentration of Endothelin in Rabbits Receiving Atherogenic Diet. 26<sup>th</sup> Congress of Cardiology, Istanbul-Turkey.
29. **Reza Badalzadeh**, Mustafa Mohammadi, Ali Abdi (2010). Effect of supplementation with diosgenin against myocardial infarction induced by ischemia-reperfusion injury. 11<sup>th</sup> Iranian Nutrition Congress, Shiraz-Iran.
30. **Badalzadeh Reza**, Mohammadi Mustafa, Najafi Moslem (2011). Diabetes mellitus abolishes the cardioprotective effect of ischemic postconditioning against ischemia/reperfusion injury in rat: role of lipid peroxidation. International Congress on Biochemistry, Mashhad-Iran.
31. **Badalzadeh Reza**, Najafi Moslem, Mohammadi Mustafa (2011). Impairment of nitric oxide production is responsible for the failure of the cardioprotection by ischemic postconditioning in diabetic rats. 27<sup>th</sup> Cardiology Congress, Istanbul-Turkey.
32. **Badalzadeh Reza**, Mohammadi Mustafa, Najafi Moslem, ahmadiasl Naser, Farajnia Safar (2011). Loss of cardioprotection by ischemic postconditioning against ischemia/reperfusion injury in diabetic rats: role of the mitochondrial permeability

transition pores. 20th Iranian Congress on Physiology and Pharmacology, Hamedan-Iran.

33. **Badalzadeh Reza**, Mohammadi Mustafa, Najafi Moslem, ahmadiasl Naser, Farajnia Safar (2011). Loss of cardioprotection by ischemic postconditioning against ischemia/reperfusion injury in diabetic rats: role of the mitochondrial permeability transition pores. 20th Iranian Congress on Physiology and Pharmacology, Hamedan-Iran.
34. **Reza Badalzadeh**, Mustafa Mohammadi1, Moslem Najafi (2011). Impairment of nitric oxide production is responsible for the failure of the cardioprotection by ischemic postconditioning in diabetic rats. *Türk Kardiyol Dern Arş 2011, Suppl 1*; 27<sup>th</sup> Congress of Cardiology, Istanbul-Turkey.
35. **Badalzadeh R**, Mohammadi M, Yousefi B, Hodaei D (2012). Preconditioning of ischemic myocardium with diosgenin protects it against reperfusion injury. 13<sup>th</sup> Congress of the International Society for Ethnopharmacology. Graz, Austria.
36. Ebrahimi Hadi, **Badalzadeh Reza**, Mohammadi Mustafa, Shoarian Ziba, Yousefi Bahman (2013). Diosgenin reduces inflammatory response induced by myocardial ischemia-reperfusion injury. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
37. Yousefi Bahman, **Badalzadeh Reza**, Mohammadi Mustafa (2013). Diosgenin-induced protection against myocardial ischemia-reperfusion injury is mediated to some extent by nitric oxide system. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
38. Reza Balaei Abriz, **Reza Badalzadeh**, Seyyed Mahmoud Tabatabai, GholamReza Mohammad Nejad (2013). Evaluating the effect of methanol extract of cinnamon on blood lactate dehydrogenase and liver enzymes in broiler chickens infected with Escherichia Coli. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
39. Naser Ahmadiasl, Hadi Yousefi, **Reza Badalzadeh**, Alireza Alihemmati (2013). Investigation of effects of renal ischemia reperfusion (IRI) on inflammatory response and apoptosis of heart in male rat. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
40. Zolfagharzadeh N, **Badalzadeh R**, Hajihoseini R, Adeli S (2013). Concomitant effect of metanolic extraction of cinnamon and aerobic training on antioxidant power of myocardium in ischemia reperfusion injury. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
41. Alireza Alihemmati, Naser Ahmadiasl, Hadi Yousefi, **Reza Badalzadeh** (2013). Investigation of effects of renal ischemia reperfusion (IRI) on inflammatory responses and apoptosis of lungs in male rat. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
42. **Badalzadeh Reza**, Mohammadi Mustafa, Yousefi Bahman (2013). Ischemic postconditioning and cyclosporine-A protect diabetic myocardium from reperfusion injury by an additive effect: role of anti-inflammatory action. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.

43. Mohammadi Mustafa, **Badalzadeh Reza**, Shaghaghi Mehrnoosh, Dehghan Gholamreza, Ebrahimi Hadi (2013). The effect of aerobic training and Cinnamon supplementation on heart function, biochemical alterations and lipid profile following exhaustive exercise in male rats. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
44. GholamReza Mohammad Nejad, Seyyed Mahmoud Tabatabai, **Reza Badalzadeh** (2013). The effect of cinnamon extract on blood lipid profile and liver creatine kinase in broilers chicken infected with Escherichia Coli. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
45. Abbaszadeh A, Oryan Sh, **Badalzadeh R** (2013). Effect of postconditioning on inflammation induced by myocardial reperfusion injury in male Wistar rat. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
46. Heydarzadeh F, **Badalzadeh R**, Hatami H, Norouzi E (2013). Effect of troxerutin on oxidative stress induced by ischemia reperfusion injury in diabetic heart of rat. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
47. Adeli S, **Badalzadeh R**, Hajihoseini R, Zolfagharzadeh N (2013). Concomitant effect of metanolic extraction of cinnamon and aerobic training on inflammatory mediators of myocardium in ischemia reperfusion injury. 21<sup>st</sup> International Congress on Physiology and Pharmacology, Tabriz-Iran.
48. **Badalzadeh R**, Javadi A, Mohammadi M (2015). Involvement of glycogen synthase kinase-3 $\beta$  and oxidation in the postconditioning induced cardioprotection loss in chronic diabetic male rats. 22<sup>ed</sup> International Congress on Physiology and Pharmacology, Kashan-Iran.
49. Javadi A, **Badalzadeh R**, Zolfagharzadeh N (2015). Combined preconditioning with cinnamon extract and aerobic training reduces oxidative stress of myocardial reperfusion injury in rat model. FAOPS congress, Bangkok-Thailand.
50. **Badalzadeh R**, Javadi A, Mohammadi M (2015). Reducing reperfusion injury in diabetic myocardium through combined postconditioning with ischemia and cyclosporine-A: oxidative stress and histo-pathological changes. FAOPS congress, Bangkok-Thailand.

### **Workshops** (Participant or Lecturer)

1. Article Writing (2003); Baqiatollah University of Medical Sciences and Tarbiat Modarres University, Tehran-Iran.
2. Research on Behavioral Sciences (2003); Pasteur Institute, Tehran-Iran.
3. Teaching Methods (2004); Baqiatollah University of Medical Sciences, Tehran-Iran.
4. Research Methodology and Search Database (2004); Baqiatollah University of Medical Sciences, Tehran-Iran.
5. Bioinformatics and Gene product Analyzing (2007); Tabriz University, Tabriz-Iran.
6. Principles and Applications of Real time polymerase chain reaction (RT-PCR) (2008); Biotechnology Research Center, Tabriz University of Medical Sciences, Tabriz-Iran.

7. Reference Manager (Preliminary) (2008); Yasudj University of Medical Sciences, Yasudj-Iran.
8. Qualitative Studies in Medical Sciences (2008); Yasudj University of Medical Sciences, Yasudj-Iran.
9. Electrophysiological Recording techniques (2008); Shahid Beheshti University of Medical Sciences, Tehran-Iran.
10. Reference Manager (Advanced) (2009); Tabriz University of Medical Sciences, Tabriz-Iran.
11. National Workshop on Powerlab Recording Systems and Advanced Techniques in Biosciences (2009); ADInstruments Company of Australia and Eqlim-Danesh Company of Iran, Tehran-Iran.
12. Modern Arena in Production of Herbal Medicine (2008); Golestan University of Medical Sciences, Gorgan-Iran.
13. Research Methodology and Scientific Writing (2009); Tabriz University of Medical Sciences, Tabriz-Iran.
14. Article Reviewing (2010); Tabriz University of Medical Sciences, Tabriz-Iran.
15. Ethics in Medical Research (Experimental, Clinical and Epidemiological Research) (2011); Tabriz University of Medical Sciences, Tabriz-Iran.
16. Principles of effective learning in electronic education (2010); EDC center, Tabriz University of Medical Sciences, Tabriz-Iran.
17. Electrophysiological methods and cardiac action potential recordings. (2011); Cardiovascular research center, Golestan University of Medical Sciences, Gorgan-Iran.
18. Western Blotting (2013); Tabriz University of Medical Sciences, Tabriz-Iran. (Lecturer-Manager).
19. Molecular techniques in Medicine (2013); Tabriz University of Medical Sciences, Tabriz-Iran. (Lecturer-Manager).
20. Application of Nanotechnology in Medical Sciences (2014); Tabriz University of Medical Sciences, Tabriz-Iran. (Lecturer-Manager).
21. Concept Map and Preparation to Medical Olympiad (2015); Tabriz University of Medical Sciences, Tabriz-Iran. (Lecturer).
22. Scientific Writing (2015); Tabriz University of Medical Sciences, Tabriz-Iran. (Lecturer).
23. Professional Ethics in Medical Sciences (2018); Tabriz University of Medical Sciences, Tabriz-Iran.

## **Research Projects and Thesis supervising**

(Up to now);

Research Projects: more than 35

PhD thesis supervising: 6

MSc thesis supervising: 16

MSc thesis Advising: 4

MD thesis supervising: 7.



## **Professional Reviewing**

(Up to now);

Reviewing for International ISI Journals: more than 60

Reviewing for National Journals: more than 40

Reviewing for Book: 4

Reviewing for Research Projects: more than 40

Reviewing for Student Thesis: more than 20

## **Language Skills**

1. **Turkish**; Mother tongue
2. **Persian**; National language
3. **English**; Good, Academic certificated
4. **Arabic**; Basic

## **Computer Skills**

1. Proficient user of Microsoft Office (MS Word, PowerPoint, Excel), Internet, Pubmed.....
2. Proficient user of SPSS, Charts, Reference manager, Powerlab systems.....

## **Research Interests**

1. Study of the electrophysiological properties of cardiac and neural cells.
2. Study of the ionic channels function in cellular and biological membranes in physiologic and pathologic conditions especially in ischemia-reperfusion injury of the heart and brain.
3. Study of the ischemic disorders of the heart in the presence of risk factors in patients and in Langendorff model of isolated heart.
4. Study of the interaction of diabetes with cerebral and cardiovascular disorders.
5. Study of the role of mitochondria and autophagy in myocardial infarction.
6. Review of the literature, High capacity of research ideas, Methods of knowledge improvement.....

**References: Available upon request.**