



Curriculum Vitae

Reza Ghahremani

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Personal Information

Date of birth: February 17th, 1990

Place of birth: Hamedan, Iran

Marital status: Single

Educational Background

- ❖ **Ph.D.** : Cardiovascular Exercise Physiology, University of Guilan, Rasht, Iran (October 2014 – February 2019), GPA: 19.39/20 (top student, first rank)

Ph.D. thesis title: The effect of high-intensity aerobic training as a preconditioning period on myocardial ischemia-reperfusion injury and mitochondrial quality control markers in male Wistar rats

Supervisor: Prof. Arsalan Damirchi

Advisors: Prof. Alireza Komaki, Prof. Iraj Salehi

- ❖ **M.Sc.** : Exercise Physiology, Bu-Ali Sina University, Hamedan, Iran (October 2012 – September 2014), GPA: 18.11/20 (top student, first rank)

Master thesis title: The acute effects of four warm-up protocols (post-activation potentiation) on vertical jumping functional and electromyographic indexes in athlete men

Supervisor: Prof. Farzad Nazem

Advisor: Prof. Mehrdad Anbarian

- ❖ **B.Sc.** : Physical Education and Sports Sciences, Kharazmi University, Tehran, Iran (February 2009 - July 2012), GPA: 17.95/20 (among top students, second rank)

Teaching Experience

- Bu-Ali Sina University (2013- 2015)
- University of Guilan (2015 - 2019)
- Kadoos Higher Education Institute (2016- 2017)
- University College of Omran and Tosseh (2019- 2020)
- University of Birjand (2020- present)

Research Interest

- Exercise-induced cardioprotection
- Neuromuscular adaptations to exercise training
- Applied physiology of handball

Publications

❖ Refereed research publications:

- **Ghahremani R**, Damirchi A, Salehi I, Komaki A, Esposito F. Mitochondrial dynamics as an underlying mechanism involved in aerobic exercise training-induced cardioprotection against ischemia-reperfusion injury. *Life Sciences* 2018; 213C: 102-108.
- **Ghahremani R**, Mohammadkhani R, Salehi I, Karimi SA, Zarei M. Sex Differences in Spatial Learning and Memory in Valproic Acid Rat Model of Autism: Possible Beneficial Role of Exercise Interventions. *Frontiers in Behavioral Neuroscience* 2022; 16: 869792.
- Rezaee N, Rahmani-Nia F, Delfan M, **Ghahremani R**. Exercise training and probiotic supplementation effects on skeletal muscle apoptosis prevention in type-I diabetic rats. *Life Sciences* 2021; 285: 119973.
- Bisconti AV, Ce' E, Longo S, Venturelli M, Coratella G, Shokohyar S, **Ghahremani R**, Rampachini S, Limonta E, Esposito F. Evidence of improved vascular function in the arteries of trained but not untrained limbs after isolated knee-extension training. *Frontiers in Physiology* 2019; 10: 727.
- Safari S, Ahmadi N, Mohammadkhani R, **Ghahremani R**, Khajvand Abedeni M, Shahidi S, Komaki A, Salehi I, Karimi SA. Sex Differences in Spatial learning and Memory and Hippocampal Long-Term Potentiation at Perforant Pathway-Dentate Gyrus (PP-DG) synapses in Wistar Rats. *Behavioral and Brain Functions* 2021; 17(1): 1-11.
- Mohammadkhani R, **Ghahremani R**, Salehi I, Safari S, Karimi SA, Zarei M. Impairment in social interaction and hippocampal long-term potentiation at perforant pathway-dentate gyrus synapses in a prenatal valproic acid-induced rat model of autism. *Brain Communications* 2022; 4(5): 1-11.
- Hasani S, Ghasemi H, Ranjbar A, **Ghahremani R**, Heidarianpour A, Abotalebian H, Gharib A, Kheiripour N. Protective effect of zinc sulfate and continuous/interval training on liver oxidative stress in morphine-

withdrawal syndrome in rats. *Physiology and Pharmacology* 2020; 24(4): 276-284.

- **Ghahremani R**, Salehi I, Komaki A, Damirchi A. Preconditioning effect of high-intensity aerobic training on myocardial ischemia-reperfusion injury and Beclin-1 gene expression in rats. *Physical Treatments* 2018; 8(2): 115-121.
- **Ghahremani R**, Nazem F. The acute effects of unilateral and bilateral squats on vertical jumping functional and electromyographic indexes in athlete men. *Journal of Sport in Biomotor Sciences* 2014; 11 (1): 26-37 [in persian].
- Seydi F, Abdolmaleki A, Anbarian M, **Ghahremani R**. The intensity influence of performing one set half-squat on vertical jump performance and muscle electrical activity in adolescent athletes. *Journal of Sport Biosciences* 2015; 7(3): 407-17 [in persian].
- Nazem F, Nazem A, **Ghahremani R**. The effects of rehabilitation resistance training on glycemic control profile in middle-aged men with type-2 diabetes. *Journal of Research in Sport Rehabilitation* 2016; 3(6): 39-47 [in persian].
- Rezaee N, Rahmani-Nia F, Delfan M, **Ghahremani R**. The effect of aerobic training and probiotic supplementation on blood glucose levels and caspase-3 gene expression in skeletal muscle of diabetic rats. *Journal of Practical Studies of Biosciences in Sport* 2022;10(23);8-18 [in persian].
- Jahed E, Mogharnasi M, Zarban A, **Ghahremani R**. Effect of four weeks home workout plan training and pomegranate supplementation on oxidative stress in overweight and obese postmenopausal women. *Journal of Birjand University of Medical Sciences* 2022; 29(2): 85-96 [in persian].
- Ghafari Z, Mogharnasi M, **Ghahremani R**. The effect of six weeks of high-intensity interval training (HIIT) and fenugreek supplementation on plasma CRP and cortisol in overweight and obese women. *Journal of Sport in Biomotor Sciences* 2022;24(2):1-10 [in persian].
- Hajizade F, Mogharnasi M, **Ghahremani R**, Kazemi T. Effect of four weeks of pomegranate supplementation and exercise at home on cardiac electrical activity and lipid profile in overweight and obese postmenopausal women. *Journal of Birjand University of Medical Sciences* 2023; 30(1): 44-55 [in persian].

- Ghafari Z, Mogharnasi M, **Ghahremani R**. The effect of 6 weeks of high-intensity interval training with fenugreek supplementation on lipid profile and body composition indices in overweight and obese women. *Armaghane-danesh* 2022;28(2):171-188 [in persian].
- Rafigh R, Mohammadnia Ahmadi M, **Ghahremani R**, Arabikhan KH. Comparing the effects of endurance and resistance training programs on some pulmonary, functional, and quality of life indicators in patients with COVID-19 discharged from hospital. *Journal of Mazandaran University of Medical Sciences* 2023;33(219):60-71 [in persian].

❖ **Papers presented in international scientific assemblies**

- **Ghahremani R**, Nazem F, Esmaeili H. The effect of type of muscle contraction in post-activation potentiation phenomenon on vertical jump performance and EMG activity of muscles during jumping in trained men. *8th international congress on physical education and sports sciences* 2015; Tehran, Iran
- **Ghahremani R**, Damirchi A. Cellular mechanisms of exercise-induced cardioprotection against myocardial ischemia-reperfusion injury. *10th international congress on physical education and sports sciences* 2017; Tehran, Iran
- Salehi I, Karimi SA, **Ghahremani R**. Neurodegenerative diseases and oxidative stress: Physical exercise as a preventive or disease-modifying treatment. *24th iranian and 3rd international congress of physiology and pharmacology* 2019; Tehran, Iran

Participation as Journal and Congress Referee

- Journal of ACTA Neurobiologiae Experimentalis (2022-present)
- Journal of Metabolism and Exercise (2023-present)
- Journal of Birjand University of Medical Sciences (2022-present)
- Journal of Sport in Biomotor Sciences (2016-present)
- Razi Journal of Medical Sciences (2018-present)
- Journal of Practical Studies of Biosciences in Sport (2020-present)
- Journal of Applied Health Studies in Sport Physiology (2021-present)
- Journal of Sport Medicine Studies (2021-present)
- The Second National Conference on Sports and Public Health; 2021, Shahid Bahonar University, Kerman, Iran
- The First National Conference on Sport, Public Participation, and Lifestyle; 2021, Bu-Ali Sina University, Hamedan, Iran

- The First National Congress on Applied Research in Sports Sciences; 2016, Tonkabon, Iran
- The Seventh National Congress on Sport Sciences; 2021, Shahid Beheshti University, Tehran, Iran
- The Second Congress on Sports Sciences; 2016, University of Guilan, Iran
- The Third Congress on Sports Sciences; 2018, University of Guilan, Iran

Research Stay in Foreign Countries

- Six-month visiting scholarship at the School of Exercise Science, Department of Biomedical Sciences for Health, University of Milan, Italy
Supervisor: Prof. Fabio Esposito
Timeline: November 9, 2017- May 9, 2018

Teaching in Professional Workshops

- Principles of designing exercise training programs for health, University of Birjand, 2021
- How to write a scientific proposal, University of Birjand, 2022
- Scientific sources management and citing with EndNote, University of Birjand, 2021

Participation in Professional Workshops

- ESC Webinars Series - Sports Cardiology. Focus on challenging arrhythmias in sports medicine: what would you do?, Webinar of the European Society of Cardiology (ESC), 2021
- ESC Webinars Series - Sports Cardiology. Focus on sports and cardiovascular health: where you draw the line?, Webinar of the European Society of Cardiology (ESC), 2021
- ESC Webinars Series - Sports Cardiology. Focus on athlete's heart vs. cardiomyopathy: the role of imaging, Webinar of the European Society of Cardiology (ESC), 2021
- Sports cardiology-focus 1: 2020 sports cardiology and physical activity in patients with cardiovascular disease ESC guidelines: implications, Webinar of the European Society of Cardiology (ESC), 2020
- How to deliver exercise-based cardiac rehabilitation, advise and motivate patients with heart failure to improve their physical activity, Webinar of the European Society of Cardiology (ESC), 2020
- How to tackle elevated cardiovascular risk in the primary and secondary prevention by multidisciplinary action?, Webinar of the European Society of Cardiology (ESC), 2020

- The road ahead in acute heart failure, Webinar of the European Society of Cardiology (ESC), 2019
- What should every cardiologist know about vascular diseases, Webinar of the European Society of Cardiology (ESC), 2019
- Exercise training and rehabilitation in chronic heart failure, Webinar of the European Society of Cardiology (ESC), 2018
- Primer design in PCR technique, Hamadan University of Medical Sciences, 2017
- EndNote, Hamadan University of Medical Sciences, 2017
- Statistical package for social sciences (SPSS), Hamadan University of Medical Sciences, 2017
- Advanced search in PubMed database, Hamadan University of Medical Sciences, 2017
- Advanced search in Scopus database, Hamadan University of Medical Sciences, 2017
- Advanced search in Clinical Key database, Hamadan University of Medical Sciences, 2017
- Clarivate Analytics, Kermanshah University of Technology, 2020

Membership in International Scientific Societies

- European Society of Cardiology (ESC)
- ESC Council on Basic Cardiovascular Science
- ESC Working Group on Coronary Pathophysiology & Microcirculation
- ESC Working Group on Cardiovascular Genomics

Skills

- Gene expression assessment by RT-PCR technique
- Primer design in PCR technique
- Cardiac ischemia-reperfusion operation on the rats
- Animal (rat) handling
- Statistical analysis by statistical package for social sciences (SPSS) software
- Assessment of muscle electrical activity (EMG) by MegaWin software
- EndNote

Collaboration with Sports Federations

- Lecturer of the coaching courses, Iran Handball Federation
- Lecturer of the coaching courses, Iran Public Sports Federation

Languages

- Persian (native)
- English (intermediate)
- Italian (elementary)

Certificates

- ✓ 1st level coaching certificate in Handball
- ✓ 2nd level Lifeguard certificate
- ✓ Swimming coach grade 3
- ✓ Coaching license grade 3 in Basketball
- ✓ Fitness coaching diploma level 3
- ✓ Soccer coach grade D

Honors

❖ Scientific

- First rank among students in Ph.D. Program
- First rank among students in M.Sc. Program
- Second rank among students in B.Sc. Program

❖ Sport

- First rank in Iran's zone-2 university competitions, Handball, 2009
- Second rank in Hamedan Province, young Handball competitions, 2008
- Third rank in Hamedan province, young Handball competitions, 2007
- Second rank in Hamedan province, adolescent Handball competitions, 2007
- Second rank in Hamedan province, adolescent Handball competitions, 2005
- Third rank in Hamedan province, high-school Handball competitions, 2004
- First rank in Hamedan province, school Handball competitions, 2003
- Second rank in Hamedan province, school Handball competitions, 2000

Reference

- Prof. Farzad Nazem, Bu-Ali Sina University, Hamedan, Iran
E-mail: farzadnazem2@gmail.com
- Prof. Arsalan Damirchi, University of Guilan, Rasht, Iran
E-mail: damirchi@guilan.ac.ir

- Prof. Alireza Komaki, Hamadan University of Medical Sciences, Hamedan, Iran
E-mail: alirezakomaki@gmail.com