# In The Name Of GOD

## **Curriculum Vitae**

Name: Houshang Najafi Marital status: Married

Scientific Degree: Ph.D (Renal Physiology)

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Medical Sciences, Kermanshah, Iran

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#### **Educational Records:**

2005 -2010: Ph.D student of physiology, Shiraz University of Medical Sciences,

Shiraz, Iran

PhD Thesis Title: Pathophysiology of renal injury progression during 24 hour

reperfusion following ischemia in rat and the role of A1-adenosine receptor

2002-2004: M.Sc student of physiology, Tabriz University of Medical Sciences, Tabriz, Iran

M.Sc. Thesis Title: The effect of senility on autoregulation of brain blood flow in man

## **Employment:**

2010 - Nov 2015: Assistant professor, Department of physiology, Kermanshah University of Medical Sciences, Kermanshah, Iran

Nov 2015 – February 2022: Associate professor, Department of physiology, Kermanshah University of Medical Sciences, Kermanshah, Iran

March 2022 - Present: Professor (full), Department of physiology, Kermanshah University of Medical Sciences, Kermanshah, Iran



## **Teaching Experiences:**

- 1. Teaching renal and gastrointestinal physiology for medical, pharmacy and dentistry students
- 2. Teaching renal and gastrointestinal physiology for MSc students of physiology
- 3. Teaching circulation and respiration physiology to dentistry students
- 4. Presentation of seminars in nephrology department
- 5. Teaching general physiology to different paramedical students

#### **Research Interests:**

- 1. All models of acute renal failure and nephrotoxicity and their effects on remote organs
- 2. Carotid baroreflex and cerebral blood flow autoregulation

#### **Publications:**

- 1. Najafi H, Khamnei S, Farhoudi M. Comparing cerebral blood flow autoregulation in young males and females. Journal of Kermanshah University of Medical sciences 2005; 9 (2): 10-17. (Persian)
- 2. Khamnei S, Farhoudi M, Najafi H, Abedinzadeh M. Cerebral blood flow velocity during a short period of carotid baroreflex stimulation in the young and middle aged humans. The internet journal of neurology 2005; volume 3, number 2.
- 3. Khamnei S, ghandchilar N, Najafi H, Farhoudi M. The effect of postvagal tachycardia on cerebral blood flow in young and middle-aged persons. Ardebil Medical University Journal 2006; 6 (1): 24-30. (Persian)
- 4. Ahmadiasl N, Khamnei S, Abedinzadeh M, Najafi H, Mohammadi M. Lung function reference values in Iranian adolescents. Eastern Mediterranean Health Journal 2006; 12 (6): 834-839.
- 5. Najafi H, Shid Moosavi SM. Contribution of  $A_1$ -adenosine receptor in the development of renal functional disturbances during early hours of reperfusion following ischemia in anaesthetized rats. Arak Medical University Journal 2010; 13 (2): 146-159. (Persian)
- 6. Najafi H, Ashtiyani SC, Khamnei S. Review of the effects of baroreceptors stimulation on heart rate and cerebral blood flow during exercise and rest. Arak Medical University Journal 2011; 14(56):106-115. (Persian)

- 7. Changizi Ashtiani S, Najafi H, Kabirinia K, Vahedi E, Jamebozorky L. Oral omega-3 administration cause to reduction of renal dysfunction induced by ischemia/reperfusion in rats. IJKD 2012; 6 (4): 275-283.
- 8. Meysam Najafi, Mohammad Najafi, Houshang Najafi. DFT/B3LYP Study to Investigate the Possible Ways for the Synthesize of Antioxidants with High Efficiency Based on Vitamin E. Bull. Korean Chem. Soc. 2012; 33 (10): 3343-3348.
- 9. Meysam Najafi, Mohammad Najafi, Houshang Najafi. DFT/B3LYP study of the substituent effects on the reaction enthalpies of the antioxidant mechanisms of Indole-3-Carbinol derivatives in the gas-phase and water. Computational and Theoretical Chemistry 2012; 999: 34–42.
- 10. Meysam Najafi, Mohammad Najafi, Houshang Najafi. DFT/B3LYP Study of the Substituent Effects on the Reaction Enthalpies of the Antioxidant Mechanisms of Magnolol Derivatives in the Gas-Phase and Water. Bull. Korean Chem. Soc. 2012; 33(11): 3607-3617.
- 11. Meysam Najafi, Mohammad Najafi, Houshang Najafi. DFT/B3LYP Study of the Substituent Effects on the Reaction Enthalpies of the Antioxidant Mechanisms of Sesamol Derivatives in the Gas phase and water. Can. J. Chem. 2012; 90: 915–926.
- 12. Changizi Ashtiani S, Najafi H, Firozifard MR, Shafaat O. Grape Seed Extract for Reduction of Renal Disturbances Following Reperfusion in Rats. IJKD 2013; 7(1): 28-35.
- 13. Meysam Najafi, Mohammad Najafi, Houshang Najafi. Theoretical study of the substituent effects on the reaction enthalpies of the antioxidant mechanisms of stobadine derivatives in the gas-phase and water. Journal of Theoretical and Computational Chemistry 2013; 12(2): 1-19.
- 14. Changizi Ashtiani S, Najafi H, Jalalvandi S, Hosseinei F. Protective Effects of Rosa Canina L Fruit Extracts on Renal Disturbances Induced by Reperfusion Injury in Rats. IJKD 2013; 7(4): 290-298.
- 15. Changizi Ashtiani S, Jafari M, Najafi H, Ahmadi M. Protective effects of Salvia Officinalis extract against gentamicin-induced nephrotoxicity in rat. Journal of Kermanshah University of medical sciences 2013; 17(4), 212-220. (persian)
- 16. Meysam Najafi, Mohammad Najafi, Houshang Najafi. Theoretical Study of the Substituent and Solvent Effects on the Reaction Enthalpies of the Antioxidant Mechanisms of Tyrosol Derivatives. Bull Chem Soc Jpn. 2013; 86 (4): 497-509.
- 17. Najafi H, Mohamadi Z, Pourmoyabed A, Madani SH, Seyedzadeh SA. Effect of Crocin on renal tissue damages and leukocyte infiltration induced by ischemia-

- reperfusion in rats. Journal of Kermanshah University of medical sciences 2013; 17(8), 394-403. (persian)
- 18. Jafarey M, Changizi Ashtiyani S, Najafi H. Calcium Dobesilate for Prevention of Gentamicin-induced Nephrotoxicity in Rats. IJKD 2014; 8(1): 46-52.
- 19. Najafi H, Mahmoudzadeh L, Shakibaei D. Protective Effects of Safron hydro alcoholic extract against renal tissue damages induced by ischemia-reperfusion in rat. Journal of Kermanshah University of medical sciences 2014; 18(3), 138-146. (persian)
- 20. Najafi H, Firouzifar MR, Shafaat O, Changizi Ashtiyani S, Hosseini N. Protective effects of Tribulus Terrestris L extract against acute kidney injury induced by reperfusion injury in rats. IJKD 2014; 8(4): 293-8.
- 21. Najafi H, Changizi Ashtiyani S, madani SH, Fakhri S, Mohamadi yarijani Z, Hazem M. Therapeutic effects of Curcumin on renal tissue damages induced by ischemia reperfusion in rat. Koomesh 2014; 16(2): 273-281.
- 22. Najafi H, Changizi Ashtiyani S, Sayedzadeh SA, Mohamadi yarijani1 Z, Fakhri S. Therapeutic effects of curcumin on the functional disturbances and oxidative stress induced by renal ischemia/reperfusion in rats. Avicenna J Phytomed. 2015; 5 (6): 576-586.
- 23. Mohamadi Yarijani Z, Najafi H, Madani SH. Protective effect of crocin on gentamicin-induced nephrotoxicity in rats. Iran J Basic Med Sci. 2016; 19: 337-343.
- 24. Najafi H, Owji SM, Kamali-Sarvestani E, Shid Moosavi SM. A1-Adenosine receptor activation has biphasic roles in development of acute kidney injury at 4 and 24 h of reperfusion following ischaemia in rats. Exp Physiol. 2016; 101(7): 913-931.
- 25. Changizi-Ashtiyani S, Alizadeh M, Najafi H, Babaei S, Khazaei M, Jafari M, Hossaini N, Avan A, Bastani B. Physalis alkekengi and Alhagi maurorum ameliorate the side effect of cisplatin-induced nephrotoxicity. Cancer Gene Therapy 2016; 23(7):235-40
- 26. Ashtiyani SC, Seddig A, Najafi H, Hossaini N, Avan A, Akbary A, Manian M, Nedaeinia R. Pimpinella anisum L. ethanolic extract ameliorates the gentamicin-induced nephrotoxicity in rats. Nephrology 2017; 22(2): 133-138.
- 27. Mahmoudzadeh L, Najafi H, Changizi-Ashtiyani S, Mohamadi yarijani Z. Antiinflammatory and protective effects of Saffron extract in ischaemia-reperfusion induced acute kidney injury. Nephrology 2017; 22(10): 748-52.
- 28. Mohamadi Yarijani Z, Pourmotabbed A, Pourmotabbed T, Najafi H. Crocin has anti-inflammatory and protective effects in ischemia-reperfusion induced renal injuries. Iran J Basic Med Sci 2017; 20:754-760.

- 29. Najafi H, Mohamadi Yarijani Z, Najafi M. Theoretical and experimental in vivo study of antioxidant activity of crocin in order to propose novel derivatives with higher antioxidant activity and their delivery via nanotubes and nanocones. Inflammation 2017; 40(5): 1794-1802.
- 30. Najafi H, Changizi-Ashtiyani S, Najafi M. Antioxidant activity of omega-3 derivatives and their delivery via nanocages and nanocones: DFT and experimental in vivo investigation. J Mol Model 2017; 23(11): 326.
- 31. Najafi H, Mohamadi Yarijani Z, Changizi-Ashtiyani S, Mansouri K, Modarresi M, Madani SH, Bastani B. Protective effect of Malva sylvestris L. extract in ischemia-reperfusion induced acute kidney and remote liver injury. Plos One 2017; 12(11): e0188270.
- 32. Mohamadi Yarijani Z, Godini A, Madani SH, Najafi H. Reduction of cisplatin-induced renal and hepatic side effects in rat through antioxidative and anti-inflammatory properties of Malva sylvestris L. extract. Biomed Pharmacother 106; 2018: 1767-1774.
- 33. Mohamadi yarijani Z, Najafi H, Shackebaei D, Madani SH, Modarresi M, Jassemi SV. Amelioration of renal and hepatic function, oxidative stress, inflammation and histopathologic damages by Malva sylvestris extract in gentamicin induced renal toxicity. Biomed Pharmacother. 2019; 112: 108635.
- 34. Mohammadi M, Najafi H, Mohamadi Yarijani Z, Vaezi G, Hojati V. Piperine pretreatment attenuates renal ischemia-reperfusion induced liver injury. Heliyon 2019; 5: e02180.
- 35. Hafazeh L, Changizi-Ashtiyani1 S, Jalali-Mashayekhi F, Rahjo T, Najafi H, Babaei S. The therapeutic effect of Centella asiatica hydroalcoholic extract on gentamicin-induced nephrotoxicity. Physiol Pharmacol 2019; 23: 215-223.
- 36. Hafazeh L, Changizi-Ashtiyani S, Ghasemi F, Najafi H, Babaei S, Haghverdi F. Stem Cell Therapy Ameliorates Ischemia-reperfusion Induced Kidney Injury After 24 Hours Reperfusion. Iran J Kidney Dis 2019; 13(6): 372-380.
- 37. Mohammadi M, Najafi H, Mohamadi Yarijani Z, Vaezi G, Hojati V. Protective effect of piperine in ischemia-reperfusion induced acute kidney injury through inhibition of inflammation and oxidative stress. Journal of Traditional and Complementary Medicine 2020; 10: 570-576.
- 38. Changizi-Ashtiyani S, Hafazeh L, Ghasemi F, Najafi H, Saeed Babaei S, JalallyMashayekhi F, et al. The effect of adipose-derived mesenchymal stem cells on renal function and histopathology in a rat model of ischemia-reperfusion induced acute kidney injury. Iran J Basic Med Sci 2020; 23:999-1006.

- 39. Hafazeh L, Changizi-Ashtiyani S, Najafi H, Ghasemi F, Rahjoo T, Babaei S, et al. Therapeutic effects of adipose-derived Mesenchymal stem cells on gentamicin-induced renal failure. Physiol Pharmacol 2020; 24: 133-141.
- 40. Mohamadi Yarijani Z, Najafi H, Madani SH. Protective Effect of P-Coumaric Acid against Cisplatin-Induced Nephrotoxicity and Hepatotoxicity in Rats. J Mazandaran Univ Med Sci 2020: 30(185): 1-13.
- 41. Najafi H, Zarei R, Alimoradian A, Asafari M, Mohammadi M, Samadi F, Ramezani M, Changizi Ashtiyani S. A review on humane endpoints in animal experimentation for biomedical research. Physiol Pharmacol 2021; 25 (1): 1-6.
- 42. Mohamadi Yarijani Z, Madani SH, Changizi-Ashtiyani S, Najafi H. Protective effects of date palm pollen extract on gentamicin-induced hepatotoxicity. Physiol Pharmacol 2021; 25 (3): 251-260.
- 43. Mohamadi Yarijani Z, Najafi H. Kidney injury in COVID-19 patients, drug development and their renal complications: Review study. Biomed Pharmacother. 2021; 142: 111966.
- 44. Omidian N, Najafi H. Pathophysiology of A1 Adenosine Receptor Inhibition in Acute Kidney Injury Induced by Ischemia-Reperfusion: a Review Study. Journal of Ardabil University of Medical Sciences. 2021; 20(4): 439-455. (persian).
- 45. Omidian N, Mohamadi Yarijani Z, Modarresi M, Godini A, Najafi H. Antiinflammatory and antioxidative properties of date pollen in the gentamicin-induced renal toxicity. Physiol Pharmacol 2022; 26(2): 145-157.

#### **Abstracts**

- 1. Najafi H. Khamnei S. Farhoudi M. Effect of postvagal tachycardia on cerebral blood flow in young persons. The 17th Iranian Congress of Physiology & Pharmacology P-151.
- 2. Najafi H. & Moosavi S.M.S. (2009): The role of  $A_1$ -adenosine receptor in progression of renal dysfunctions during 24 hour of reperfusion following ischemia in anaesthetized rats. The 19th Iranian Congress of Physiology & Pharmacology A-10-470-1.
- 3. Houshang Najafi, Seyed mostafa Shid moosavi, Seyed mohammad owji, Skandar Kamali sarvestani. The role of A1- adenosine receptor on functional disturbances, inflammation and histological damages during 4 and 24 hours of reperfusion following renal ischemia. The 20th Iranian Congress of Physiology & Pharmacology.

- 4. Seyed mostafa Shid moosav, Houshang Najafi, Seyed mohammad Owji, Skandar Kamali sarvestani. How and when during reperfusion following ischemia the effects of A1-adenosine receptor inhibition on renal injury are reversed. The 20th Iranian Congress of Physiology & Pharmacology.
- 5. Zeynab Mohamadi, Houshang Najafi, Ali Pourmotaabed. Survey the effects of crocin on renal functional disturbances and histological damages following ischemia reperfusion in rat. The 21th Iranian Congress of Physiology & Pharmacology.
- 6. Houshang Najafi, Zeynab Mohamadi. Anti-inflammatory and Protective Effects of Crocin in Ischemia- Reperfusion Induced Renal Injuries. The first international and 22th Iranian Congress of Physiology & Pharmacology.
- 7. Zeynab Mohamadi, Houshang Najafi. Protective Effect of Crocin on Gentamicin-Induced Nephrotoxicity in Rat. The first international and 22th Iranian Congress of Physiology & Pharmacology.