

Curriculum Vitae

Personal Background:

Name: Narges Karbalaei Harofteh

Date of Birth: September 20, 1965

Nationality: Iranian

Gender: Female

Marital status: Married (two children)

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Education

2013 Ph.D. in Medical Physiology from Shaheed Beheshti University of Medical Sciences, Tehran, Iran.

1996 M.Sc. in Physiology from Shiraz University of Medical Sciences, Shiraz, Iran.

1988 B.Sc. in Biology, School of Sciences, Ferdosi Mashhad University, Iran.

Employment:

July 2018- Present ; Associate professor, Department of Physiology, Medical School, Shiraz University of Medical Sciences

July 2013- 2018; Assistant professor; Department of Physiology, Medical School, Shiraz University of Medical Sciences.

April 2001-January 2008; Instructor of physiology& Medical physiology lab manager; Department of Physiology, Medical School, Shiraz University of Medical Sciences.

October 1996- March 2001; Instructor of physiology; Department of Physiology, Zahedan University of Medical Sciences, Zahedan, Iran.

Membership:

Member of Histomorphometry & Stereology Research Center (HSRC)

Member of Iranian Society of Physiology and Pharmacology (ISPP).

Research interest:

Endocrine physiology

Neuroendocrinology

Reproductive physiology

Publications :

- 1- Ghaffari, M.K., Rafati, A., [Karbalaei, N.](#) Haghani, M., Nemati, M., Sefati, N . The effect of intra-nasal co-treatment with insulin and growth factor-rich serum on behavioral defects, hippocampal oxidative-nitrosative stress, and histological changes. *Naunyn-Schmiedeberg's Archives of Pharmacology*, 2023 Dec 29. doi: 10.1007/s00210-023-02899-3.
- 2- Esmailpour, T., Lotfealian, A., Anvari M., Namava, M., [Karbalaei, N.](#), Salari, V., Shahedi A, , Bokkon I, Salari V, Oblak, D. Effect of Methamphetamine on Ultraweak Photon Emission and Level of Reactive Oxygen Species in Male Rat BrAIN. *Neurosci Lett.* 2023; 28:801:137136.
- 3- Aghaei, Z., [Karbalaei, N.](#), Namavar, M.R., Haghani M, Razmkhah M, Ghaffari, M.K., Nemati, M. Neuroprotective Effect of Wharton's Jelly-Derived Mesenchymal Stem Cell-Conditioned Medium (WJMSC-CM) on Diabetes-Associated Cognitive Impairment by Improving Oxidative Stress, Neuroinflammation, and Apoptosis. *Stem Cells International*, 2023,7852394: 1-18
- 4- Nemati, M., Ebrahimi, Z., [Karbalaei, N.](#), Khakshournia, S., Sargazi, M. In Vitro and In Vivo Improvement of Islet Quality and Transplantation Successes following Islet Treatment with Biomaterials in Diabetic Rats. *Journal of Diabetes Research* , 2023, 1399917, 1-14
- 5- Maleki, S., Keshtgar, S., Ebrahimi, B., [Karbalaei, N.](#), Masjedi, F. Effects of CatSper Stimulation and Inhibition by Progesterone and NNC on Human Sperm. 2023; 2023: 1- 8
- 6- Keshavarz S, Owjfar M, [Karbalaei N.](#) Antioxidant Effects of Defrasirox, Defropyrone, and Their Combination on Lead-Induced Nitro-Oxidative Stress in Male Rats. *Journal of Mazandaran University of Medical Sciences.* 2023; 33(223): 11-24.

- 7- Gharanjik, F., Shojaeifard, M.B., [Karbalaeei, N.](#), Nemati, M. The Effect of Hydroalcoholic Calendula Officinalis Extract on Androgen-Induced Polycystic Ovary Syndrome Model in Female Rat. *BioMed Research International*, 2022,7402598:1-16.
- 8- Nemati, M., [Karbalaeei, N.](#), Mokarram, P., (...), Dastghaib, S., Aghaei, Z. Cotransplant With Pancreatic Islet Homogenate Improved Survival and Long-Term Efficacy of Islet Transplant in Streptozotocin-Diabetic Rats. *Experimental and Clinical Transplantation* .2022; 20(2):164-172
- 9- Rahimi, A., Rafati, A., Noorafshan, A., [Karbalaeei, N.](#), Karbalay-Doust, S., Naseh, M. Stereological and Biochemical Effects of Curcumin on the L-Methionine-Induced Cardiotoxicity in Rats. *Iranian Journal of Science and Technology, Transaction A: Science*. 2021; 45(3): 841-847
- 10- Rahimi, A., Rafati, A., Noorafshan, A., [Karbalaeei, N.](#), Karbalay-Doust, S. Curcumin can prevent the loss of sinoatrial node cells in methionine-treated rats: A stereological study. *Saudi Journal of Biological Sciences*.2021; 28(6): 3448-3452
- 11- Nemati, M., [Karbalaeei, N.](#), Mokarram, P., Dehghani, F. Effects of platelet-rich plasma on the pancreatic islet survival and function, islet transplantation outcome and pancreatic pdx1 and insulin gene expression in streptozotocin-induced diabetic rats. *Growth Factors*. 2020; 38(3-4): 137-15
- 12- Shahraki, Z.S., [Karbalaeei, N.](#), Nemati, M. Improving effect of combined inorganic nitrate and nitric oxide synthase inhibitor on pancreatic oxidative stress and impaired insulin secretion in streptozotocin induced-diabetic rat *Journal of Diabetes and Metabolic Disorders* 2020: 19(1) 353-9.
- 13 - Mehrabianfar P, Dehghani F, [Karbalaeei N](#), Mesbah F. The effects of metformin on stereological and ultrastructural features of the ovary in streptozotocin-induced diabetes adult rats: An experimental study. *International Journal of Reproductive BioMedicine*, 2020, 18(8): 651-666.
- 14 - Bayat, M., Zabihi, S., [Karbalaeei N](#), Haghani, M. Time-dependent effects of platelet-rich plasma on the memory and hippocampal synaptic plasticity impairment in vascular dementia induced by chronic cerebral hypoperfusion. , *Brain Research Bulletin*. 2020, 164, 299-306.
- 15- Masjedi F, Keshtgar S, Agah F, [Karbalaeei, N](#). Association between sex steroids and oxidative status with Vitamin D levels in follicular fluid of non-obese PCOS and healthy women. 2019; *Journal of Reproduction & Infertility* 20(3), pp. 132-142.

- 16- Zarin M, [Karbalaeei N](#), Keshtgar S , Nemati M. Platelet-rich plasma improves impaired glucose hemostasis, disrupted insulin secretion, and pancreatic oxidative stress in streptozotocin-induced diabetic rat. *Growth Factors*. 2019; VOL. 37, NOS. 5–6, 226–237.
- 17- [Karbalaeei N](#), Sadeghi N, Nekoeian A, Malekzadeh A. Impact of Hydroalcoholic Extract of *Humulus Lupulus L.* on Sperm Quality, Reproductive Organs and Hormones in Male Rats. *Chinese Journal of Integrative Medicine*. 2019; 25(7): 529-535.
- 18- Masoumi A, [Karbalaeei N](#), Mortazavi SMJ, Shabani M. Radiofrequency radiation emitted from Wi-Fi (2.4 GHz) causes impaired insulin secretion and increased oxidative stress in rat pancreatic islets. *Int. J. Radiat. Biol.* 2018; 94(9): 850–857.
- 19- Sargazi, M., Zal, F., [Karbalaeei N](#). Effects of cadmium on oxidative stress markers, and insulin secretion and content in pancreatic isolated islet of rat. *Journal of Mazandaran University of Medical Sciences*. 2018; 27 (158: 1-14.
- 20- Sadeghi, N., [Karbalaeei N](#), Malekzadeh, A. The effect of (*Humulus lupulus L.*) extract on blood factors in male rat. *Comparative Clinical Pathology*. 2018; 27(4): 841-845.
- 21- [Karbalaeei N](#), Noorafshan A, Hoshmandi E. Impaired glucose-stimulated insulin secretion and reduced β -cell mass in pancreatic islets of hyperthyroid rats. *Exp Physiol*. 2016 Aug 1;101(8):1114-27.
- 22- Safayee S, [Karbalaeei N](#) , Noorafshan A , Nadimi E. Induction of oxidative stress, suppression of glucose-induced insulin release, ATP production, glucokinase activity, and histomorphometric changes in pancreatic islets of hypothyroid rat. *European Journal of Pharmacology* 2016; 791: 147–156.
- 23- Rouintan Z, K. 3- Farrokhfall K, [Karbalaeei N](#), Ghasemi A. Nitric Oxide Overproduction Reduces Insulin Secretion from Isolated Islets in Fetal Hypothyroid Rats. *Horm Metab Res* 2016; 48: 145–150.
- 24- Khajehdehi MM, Qujeq D, Peirovi H, [Karbalaeei N](#), Mowla SJ. Function of rat diabetic islets improved by coculturing with pancreatic mesenchymal stromal cells. *J Stem Cell Res Transplant*. 2015;2(1): 1016.
- 25- Godini A, Ghasemi A, [Karbalaeei N](#), Zahediasl S. The Effect of Thyroidectomy and Propylthiouracil-Induced Hypothyroidism on Insulin Secretion in Male Rats. *Hormone and Metabolic Research* 46 (10): 710-716.

- 26- Farrokhfall K, Khoshbaten A, Zahediasl S, Mehrani H, [Karbalaie N](#). Improved islet function is associated with anti-inflammatory, antioxidant and hypoglycemic potential of cinnamaldehyde on metabolic syndrome induced by high tail fat in rats. *Journal of functional foods* 10 (2014): 397–406
- 27- [Karbalaie N](#), Ghasemi A, Hedayati M, Godini A, Zahediasl S. The possible mechanisms by which maternal hypothyroidism impairs insulin secretion in adult male offspring in rats. *Exp Physiol*. 2014 Apr; 99(4):701-14.
- 28- [Karbalaie N](#), Ghasemi A, Faraji F, Zahediasl S. Comparison of the effect of maternal hypothyroidism on carbohydrate metabolism in young and aged male offspring in rats. *Scand J Clin Lab Invest*. 2013 Feb; 73(1):87-94.
- 29- Shafaeizadeh S, Jamalian J, Owji AA, Azadbakht L, Ramezani R, [Karbalaie N](#), Rajaeifard A, Tabatabaei N. The effect of consuming oxidized oil supplemented with fiber on lipid profiles in rat model. *J Res Med Sci*. 2011 Dec;16 (12):1541-9
- 30- Rajaeifard AR, Tabatabaei N, Jamalian J, Ramezani R, Owji AA, [N. Karbalaie](#). Effects of selenium supplementation on lipid peroxidation induced by thermally oxidized sunflower oil. *Toxicol Lett*. 2010; 196
- 31- Tabatabaei N, Jamalian J, Owji AA, Ramezani R, [Karbalaie N](#), Rajaeifard AR. Effects of dietary selenium supplementation on serum and liver selenium, serum malondialdehyde and liver glutathione peroxidase activity in rats consuming thermally oxidized sunflower oil. *Food and Chemical Toxicology*. 2008; 46: 3501–3505
- 32- Dehghani GA, [Karbalaie N](#), Ranjbar Omrani GA. Antidiabetic effect of vanadyl sulphate in experimental polyuric rats, *Kowsar medical journal* 1997; 2(3): 153-161.

Presentations

- 1- [Karbalaie N](#), Hamzavi, GH, Akbari, Z. Antiarrhythmic Effects of Ginger and Intermittent Fasting on Cacl2 Induced-Arrhythmia .5th international and 26th Iranian and Congress of Physiology and Pharmacology. 11-13 , Oct. 2023, Semnan, Iran.
- 2- Akbari, Z. [Karbalaie N](#). Effects of lead chloride on insulin secretion and oxidative stress in pancreatic isolated islet of rats .5th international and 26th Iranian and Congress of Physiology and Pharmacology. 11-13, Oct. 2023, Semnan, Iran.
- 3- [Karbalaie N](#), Zarin M, Keshtgar S, Nemati M. Platelet rich plasma (PRP) improve impaired glucose hemostasis, disrupted insulin secretion and pancreatic oxidative stress in streptozotocin-induced diabetic rat. 24th Iranian & 3rd International and 24 Iranian Congress of Physiology and Pharmacology. 30 Oct-01 Nov, 2019, Tehran, Iran.

- 4- Nemati M, [Karbalaeei N](#), Pancreatic islets homogenate (PIH) improves pancreatic islet survival, insulin secretion and islet transplantation outcome and glucose homeostasis in STZ diabetic rats. 24th Iranian & 3rd International and 24 Iranian Congress of Physiology and Pharmacology. 30 Oct-01 Nov, 2019, Tehran, Iran.
- 5- [Karbalaeei N](#), Sargazi M , Zal F. Combined protective effect of Zinc and gossypin on insulin secretion and cadmium induced oxidative stress in pancreatic isolated islet of rats . 2nd International and 23rd Iranian Congress of Physiology and Pharmacology Chabahar, Iran, 15-18 Feb. 2018.
- 6- Karbalaeei N, Noorafshan A, Safayee S, Hoshmandi E. Effects of thyroid status on insulin secretion in rat pancreatic islets and role of KATP channels. 1st International 22nd Iranian Congress of Physiology and Pharmacology, 2015, Kashan, Iran.2015.
- 7- [Karbalaeei N](#), Ghasemi A, Hedayati M, Godini A. Functional defects of insulin secretion in pancreatic islets of fetal hypothyroid rats. 22-24 , Oct. 2014, Tehran, Iran.
- 8- [Karbalaeei N](#), Ghasemi A, Hedayati M, Godini A, Zahediasl S. Association between reduced insulin secretion in fetal hypothyroid rats with glucose phosphorelating enzyme activity and islet cAMP content. 21st International Iranian Congress of Physiology & Pharmacology, 23-27, Aug. 2013, Tabriz, Iran.
- 9- Ghanbari M, Bagheri pour F, [Karbalaeei N](#), Ghasemi A, Zahediasl S. The effect of maternal hypothyroidism on blood pressure of the offspring in male rats. 21st International Iranian Congress of Physiology & Pharmacology, 23-27 Aug. 2013, Tabriz, Iran
- 10- [Karbalaeei N](#), Ghasemi A, Faraji F, Zahediasl S. Comparison of the effect of maternal hypothyroidism on carbohydrate metabolism in young and aged male offspring in rats. 10th Asia and Oceania Thyroid Association Congress. 21-24 Oct. 2012, Bali, Indonesia.
- 11- [Karbalaeei N](#), Ghasemi A, Faraji F, Zahediasl S. The effect of maternal hypothyroidism on insulin secretion in young and aged male offspring in rat. 20th International Iranian Congress of Physiology & Pharmacology, 10-14 Oct, 2011.Hamedan, Iran
- 12- [Karbalaeei N](#), Panjehshahin, MR, Dehghani F. Effect of dietary Flaxseed on endogenous sex hormones and uterine weight in ovariectomized female rats. The 9th Iranian Congress of biochemistry & 2nd International Congress of biochemistry and molecular biology. Oct. 29- Nov. 1, 2007, Shiraz, Iran.
- 13- [Karbalaeei N](#), Panjehshahin, MR, Dehghani F. The effect of Flaxseed administration during pregnancy and lactation on sex hormone levels and reproductive system in male offspring. The 6th of the federation of Asian and Oceanian Physiological Societies, 15-18 Oct. 2006, Seoul, Korea.

- 14- [Karbalaee N](#), Panjehshahin, M.R., Dehghani F. The effect of maternal exposure to flaxseed on **sex** hormone levels and sexual development in male rats. The 17th International Congress of Geographic Medicine, 23-25 Nov. 2004, Shiraz, Iran
- 15- [Karbalaee N](#), Dehghani GA. Effect of vanadyl sulphate on water intake, urine and plasma osmolarity in lithium induced diabetic insipidus rats. 14th International congress of Geographic Medicine and 15th Iranian Congress of Physiology & Pharmacology - Nov. 5-8 2001, Shiraz, Iran.
- 16- Dehghani GA, [Karbalaee N](#) , Ranjbar Omrani GA. Effect of vanadyl sulphate on water reabsorption in experimental polyuric rats. 13th Iranian Physiology & Pharmacology Congress, 26-29, Aug. 1997, Isfahan, Iran.
- 17- [Karbalaee N](#) , Dehghani GA Vanadyl and its antidiabetic effects in diabetic insipidus in nephrogenic diabetic rats. 12th Iranian Physiology & Pharmacology Congress, 6-9 Nov 1995, Tehran, Iran.