# **CURRICULUM VITAE**

Personal Details	
Name:	Somayeh Nazari
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# **Educational Background:**

2004-2008 **B.Sc. Biology,** Department of Biology, Shahid Bahonar University of Kerman, Kerman, Iran.

2009-2012 **M.Sc. Physiology**, Department of Biology, Shahid Bahonar University of Kerman, Kerman, Iran.

Project Title: Investigation of the antioxidant, antidiabetic and antilipid peroxidative activities of the methanol extract of *Dracocephalum polychaetum*.

2014-2020 **Ph.D. Medicinal Physiology,** Department of Physiology, Shiraz University of Medical Sciences, Shiraz, Iran.

Project Title: Temporal patterns of alterations in obesity index, plasma lipid profile and glucose as well as renal pressure-natriuresis during developmental period of obesity-induced hypertension: Roles of renal nerves and sexuality.

### **Publications:**

- (1) Pouraboli I, <u>Nazari S</u>, Ranjbar B, Shariati M. Antihyperglycemic and antihyperlipidemic effects of *Daucus Carota ssp.sativum* seeds extract in diabetic rats. *Journal of Babol University of Medical Sciences*. **2014**; 16(3): 33-40.
- (2) Pouraboli I, <u>Nazari S</u>, Sabet N, Sharififar F, and Jafari M. Antidiabetic, antioxidant, and antilipid peroxidative activities of *Dracocephalum polychaetum* shoot extract in streptozotocin-induced diabetic rats: In vivo and in vitro studies. *Pharmaceutical Biology*. **2016**; 54(2): 272-8.
- (3) Salehi MS, Pandamooz S, Borhani-Haghighi A, Safari A, Tamadon A, Jurek B, Moosavi SMS, Nazari S, Keshavarz S, et al. Comparison between therapeutic effects of EPI-NCSCs and BM-MSCs on stroke induced by middle cerebral artery occlusion. *CNS Neuroscience & Therapeutics*. **2020**; 26(7): 670-681.
- (4) <u>Nazari S</u>, Kourosh Arami M, Komaki A, Hajizadeh S. Relative contribution of central and peripheral factors in superficial blood flow responses following cold exposure. *Physiology and Pharmacology.* **2020**; 24: 89-100.
- (5) Piri Z, Arami MK, Shahidi M, <u>Nazari S</u>. Alteration of hematologic parameters by long-term administration of orexin type 1 receptor antagonism in morphine dependent rats. *International Journal of High Risk Behaviors and Addiction.* **2020**; 9(3): e99081.
- (6) <u>Nazari S</u>, **Haghani M**, **Moosavi SMS**. Bilateral renal denervation prevents the development of hypertension during diet-induced obesity in male rats. *Experimental Physiology*. **2021**; 106(11): 2248-61.
- (7) <u>Nazari S</u> and Moosavi SMS. Temporal patterns of alterations in obesity index, lipid profile, renal function and blood pressure during the development of hypertension in male, but not female, rats fed a moderately high-fat diet. *Archives of Physiology and Biochemistry*. **2022**; 128(4): 897-909.
- (8) Naderi E, Khajavi Rad A, <u>Nazari S</u>, et al. *Nigella sativa* and its main constituent, thymoquinone protect against glycerol-induced acute kidney injury in rats. *Avicenna Journal of Phytomedicine*. **2022**; 12(6): 638-48.
- (9) Namavar MR, Talebianpoor MS, <u>Nazari S</u>, Mirkhani H. The effect of tempol, a potent synthetic antioxidant, on the limb teratogenicity in an experimental model of preeclampsia in rat. *Physiology and Pharmacology*. **2023**. 27(3): 254-260.
- (10) <u>Nazari S</u>, Mirkhani H. Cardiorenal protections of SGLT2 inhibitors in the treatment of type 2 diabetes. *Current diabetes Reviews*. **2023**; 19(8): e221222212126.
- (11) Firouzi M, Haghighijoo Z, Eskandari M, Mohabbati M, Miri R, Jamei MH, Poustforoosh A, Nazari S, Firuzi O, Khoshneviszadeh M, Edraki N. Synthesis and Cytotoxic Activity Evaluation of Novel Imidazopyridine Carbohydrazide Derivatives. *BMC Chemistry.* 2024; 18(1) 6.

- (12) <u>Nazari S</u>, Mosaffa F, Poustforoosh A, Mortazavi M, Saso L, Firuzi O, Moosavi F. Foretinib, a c-MET receptor tyrosine kinase inhibitor, tackles multidrug resistance in cancer cells by inhibiting ABCB1 and ABCG2 transporters. *Toxicology and Applied Pharmacology* **2024**; 484: 116866.
- (13) Maftoon-Azad MJ, Nazari S, Keshavarz S, Owji SM, Moosavi SMS. Transmission of high arterial pressure into renal microvessels during venous-clamping augments ischemia/reperfusion-induced acute kidney injury in anaesthetized rats. *Nephrology* **2024**; 29(4): *188-200*.
- (14) Moosavi F, Hassani B, Nazari S, Saso L, Firuzi O. Targeting DNA damage response in pancreatic ductal adenocarcinoma: A review of preclinical and clinical evidence. *Biochimica et Biophysica Acta (BBA)-Reviews on Cancer* 2024; 1879(6):189185.

### **Projects:**

Co-investigator of Miss H. Kazemi, Ph.D. Candidate in Physiology (Nov. 2023): Comparison of ischaemia-reperfusion-induced acute kidney injury by renal arterial or venous clamping in non-diabetic rats and also diabetic rats with and without aminoguanidine treatment.

**Co-investigator of research proposal approved in 2023-07-31**: Evaluation of the effect of c-MET tyrosine kinase inhibitors crizotinib, cabozantinib and PHA66752 on ABCG2 transporter involved in the multidrug resistance in cancer.

Co-investigator of research proposal approved in 2022-09-28: Overcoming drug resistance in cancer cells using combination therapies based on protein kinase inhibitors.

Co-investigator of review proposal approved in 2022-04-11: Inhibition of DNA damage response proteins as therapeutic opportunity for pancreatic cancer. (Finished)

Advisor of Mr M.J Maftoon Azad, M.Sc. Candidate in Physiology (Nov. 2021): To Study the effects of reduced renal perfusion pressure during ischemic period on acute kidney injury induced by ischemia-reperfusion via renal vein occlusion in anaesthetized rats. (Finished)

Co-investigator of NIMAD research proposal approved in 2021-11-30: Design, synthesis and biological evaluation of novel Empagliflozin-based sodium/glucose cotransporter-2 inhibitors as potential effective compounds for the control of diabetes. (In process)

Co-investigator of NIMAD research proposal approved in 2021-11-17: *In vitro* identification of clinically approved c-MET receptor tyrosine kinase inhibitors for repurposing to overcome multidrug resistance by inhibiting ABC transporters. (Finished)

همكار طرح تحقیقاتی مربوط به هسته تحقیقاتی گیاهان دارویی در ۱۳۹۰ با عنوان " سنجش فعالیت آنتی اكسیدانی و بدام "Dracocephalum polychaetum, Nepeta assurgens, Ferula foetida" اندازی رادیكالهای آزاد سه گیاه از ایران ایران

## **Congress presentations:**

<u>Nazari S</u>, Pouraboli I. Effect of hydroalcoholic extract of *Dracpcephalum polychaetum* on serum levels of glucose, lipids and some serum biochemical factors in diabetic rats. 2<sup>nd</sup> *International Congress of Physiology and Pharmacology*. **2018**, Chabahar, Iran.

<u>Nazari S</u>, Moosavi SMS. Bilateral renal denervation prevents induction of hypertension by long-term feeding moderately high-fat diet in obesity-prone rats. 24<sup>th</sup>Iranian & 3<sup>th</sup> International Congress of Physiology and Pharmacology. **2019**. Tehran, Iran.

**Moosavi F, Nazari S, Mosaffa F, Firuzi O.** Foretinb, a c-MET receptor tyrosine kinase inhibitor, tackles multidrug resistance in cancer cells by inhibiting ABCB1 and ABCG2 transporters. 5<sup>th</sup> International & 26<sup>th</sup> National Congress of Physiology and Pharmacology. **2023**. Semnan, Iran.

**Firuzi O, Nazari S, Moosavi F, Mosaffa F.** Met receptor tyrosine kinase inhibitors reverse anticancer drug resistance in ABCB1 and ABCG2 overexpressing cells. 5<sup>th</sup>International & 26<sup>th</sup> National Congress of Physiology and Pharmacology. **2023.** Semnan. Iran.

**Mardaneh P, Firoozi R, Mortazavi M, Tavakkoli M, Nazari S, Khoshnoud MJ, Moosavi F, Firuzi O.** Combination of Met kinase inhibitors and doxorubicin has a synergistic effect against pancreatic ductal adenocarcinoma cells: Involvement of reactive oxygen species. *The 24<sup>th</sup> National and 10<sup>th</sup> International Annual Research and Technology Congress of Iranian Medical Sciences Students.* **2023**. Tehran, Iran.

سمیه خالصی، ایران پورابولی، فریبا شریفی فر، سمیه نظری، الهام خوشه بست. سنجش فعالیت آنتی اکسیدانی و بدام اندازی رادیکالهای آزاد سه گیاه از ایران Dracocephalum polychaetum, Nepeta assurgens, Ferula foetida. هفتمین همایش بیوتکنو لوژی جمهوری اسلامی ایران، تهران، ۱۳۹۰

# **Teaching Experiences:**

Lecturer in physiology laboratory for Doctor of Medicine (M. D), dental and pharmacy.

Teaching physiology for nutrition (B.Sc.).

Teaching physiology for laboratory sciences (B.Sc.).

Teaching physiology for public health (B.Sc.).

#### **Research interest:**

- 1- Obesity-induced hypertension
- 2- Ischemia/reperfusion-induced acute kidney injury

- 3- Diabetes
- 4- Investigation of anticancer and multidrug resistance (MDR) reversal agents and their mechanisms of action by application of cell biology techniques

#### **Skills:**

- Animal model for diabetes
- Animal model for inducing obesity-hypertension
- Cannulation of femoral vein and artery and carotid artery
- Recording non-invasive blood pressure
- Renal autoregulation assessment method
- Blood samples from eye, lateral tail vein and heart in rats
- Injection into lateral tail vein
- Recording of renal blood flow
- Gavage in rats
- Oxidative stress tests
- Ischemia/reperfusion-induced acute kidney injury
- Preparation of plant extract
- Hematological techniques
- Histological methods
- Metabolic cage study
- Cell Culture
- Flow cytometric detection of rhodamine 123 accumulation in cells
- Hoechst staining assay
- Measurement of cell viability by MTT assay
- Fluorescence microscopy of cellular rhodamine 123 uptake
- MDR (multidrug resistance reversal) assay
- Endnote software
- SPSS software
- Imagej software
- Flowjo software
- Microsoft Office<sup>TM</sup> tools

## Workshops:

- Systematic Review and Meta-analysis. Shiraz HIV/AIDS Research center. 2019, Shiraz, Iran.
- Statistical analysis of data with SPSS software. Research consultation center. 2018, Shiraz, Iran.

- Labchart and powerlab basics of data acuquisition. Shiraz university of medical sciences. 2018, Shiraz, Iran.
- Endnote X7. Research consultation center. 2018, Shiraz, Iran.
- PCR& Electrophoresis. Sadra Stem Cell Laboratory, Shiraz, Iran.
- How to write a good paper. Research consultation center. 2018, Shiraz, Iran.
- Two kidney-one clip Goldblott hypertention. Pharmacology Cardiovascular Lab, Shiraz, Iran.
- Graphpad prisme software. Research consultation center. 2018, Shiraz, Iran.
- German International Scientific Exchanges Funding Organizations. 2018, Shiraz, Iran.
- Real time PCR. Shiraz university of medical sciences. 2019, Shiraz, Iran.