#### **Curriculums Vitae**

#### Personal data:

Name: Manzar Banoo Shjaeifard

**Place of birth**: Shiraz, Iran

**Nationality**: Iranian

Address: Ghoddousi Blv West, Shahid Mahalatti St. Second alley on the right

side, no. 64

E-mail. Shojaeim@sums.ac.ir

# **Academic qualification:**

**2010-2011**: **Post Doctor** in the Institut of Physiology, Eberhard-Karls University of Tuebingen, Germany

**2003-2005**: **PhD** fellow in the Institut of Physiology, Eberhard-Karls University of Tuebingen, Germany

Thesis Title: "Regulation of membrane transporters by Kinases

# completing MS in Physiology

Physiology Department, University of Tarbiat Modaress

**Thesis Title**: The role of A2-adrenoceptor in analgesia induced TENS

completing BS in biology: Biology Department, University of Shiraz

completing high school diploma, experimental science

Neshat high school, Shiraz

### **Teaching experience:**

#### **Lecturer:**

2002- 2014 different physiological systems (Cell physiology, Neurophysiology, Cardiovascular physiology, Respiratory physiology, Renal physiology, Digestive physiology, Endocrinology physiology, Blood physiology...) to medical students, Fasa University of Medical Science.

2014-2022: Cellular physiology, endocrinology and a few sections of Cardiovascular physiology to medical students, Also Cellular physiology, Cardiovascular physiology and endocrinology to MS. students of Physiology, Also a few sections of cellular physiology and endocrinology to MS. students of Biochemistry and Nursing, Fasa University of Medical Sciences. (Theory and functional Physiology).

#### **Guest Lecturer:**

**2006**: a few sections of cellular physiology to Ph.D. students of physiology Shiraz University of Medical Faculty

**different years**: neurophysiology, cell physiology &digestive system, to medical students, Medical Faculty of Jahrom

**different years**: neurophysiology, physiology of endocrine & digestive systems, to medical students, Shiraz University of Medical Faculty **different years**: some sections of neurophysiology to Ph.D. students of laboratory sciences

## **General Lecturing:**

2022-2002: general physiology, to nursing & laboratory science students, anesthesiology, operating room, emergency medicine& public healthy students, Fasa University of Medical Science different years: general physiology to nursing and midwifery students (B.S.), operating room technicians & laboratory sciences, nursing & midwifery Faculty of Hazrate Fatemeh and Para- medical Faculty, Shiraz University of Medical Sciences

#### **Researches:**

- 1-Research on the A2-adrenoceptors on the analgesia induced by TENS
- 2-Effect of A1-adrenoceptors on the analgesia induced by TENS
- 3-Research assistant on the effects of ICV injection of GLP-1 & its related peptides on sertonine metabolism & on level of amino acids in the rat hypothalamus.
- 4-Research on the effect of immobilization&water immersion stress on the induction of diabetes mellitus.
- 5-Research assistant on the effect of exercise on some factors of male reproductive systems.
- 6-Research assistant on the effect of testosterone enanthate on the blood proteins in the rat.
- 7-Research assistant on the role of drug of testosterone enanthate on the tissues of skins & hair.
- 8-Research on the The effects of Elaeagnus angustifolia L on bone mineral content in pregnant mice
- 9- Research on the effect of trace elements in atrial fibrilation patients

- 10- Research on the Stimulation of the creatine transporter SLC6A8 by the serum and glucocorticoid dependent kinases SGK 1 and SGK3
- 11- Research on the Stimulation of the creatine transporter SLC6A8 by the protein kinase mTOR
- 12- Research on PIKfyve in the SGK-1 mediated regulation of the the creatine transporter SLC6A8
- 13- Research on Regulation of the Na+, glucose co-transporter by PIKfyve and the serum & glucocorticoid inducible kinase SGK1
- 14- Research on Stimulation of the glucose carrier SGLT1 by JAK2
- 15- Research on Down regulation of NaPi-IIa and NaPi-IIb Na+-coupled phosphate transporters by coexpression of Klotho
- 16- Research on Down regulation of the creatine transporter SLC6A8 by JAK2
- 17- Research On Up-regulation of the betaine/GABA transporter BGT1 by JAK2
- 18- Research on Stimulation of Na+ coupled phosphate transporter NaPiIIa by janus kinase JAK2
- 19- Research on Acute and chronic exposure of chick embryo to ethanol alters brain neurosteroid levels

- 20- Research on "The protective effects of hydro-alcoholic extract of sea buckthorn (Hippophaerhamnoides L.) in spermatogenesis of rat after exposure of Wi-Fi radiation
- 21- Research on Evaluating of the hydro alcoholic extract effect of Anacyclus Pyrethrum plant on PTZ- induced seizures in male rats.
- 22- Research on Design and Fabrication of Helmoltz Coil to study the effect of pulsed ElectroMagnetic Fields on the Healing process periodontitis
- 23- Research on Effects of hydro-alcoholic extract of broccoli (Brassica *oleracea*) on sensory threshold of pain using the formalin test in adult male rats
- 24- Research on Effects of administration of hydro-alcoholic extract of ginger (*Zingiber officinale*) on blood serum cations (Mg, Na +, K+, Ca2 +) and. the sex ratio of male and female newborn Wistar rats.

### **Consultancy:**

2016-2009: Supervisor of Advisors of students, Fasa University of Medical Science

2014-2002: Consultant of Junior medical students, Fasa University of Medical Science

# Workshops attended

1991: Research methods center for medical education, Shiraz University of Medical Sciences

1992: Teaching methods center for medical education, Shiraz University of Medical Sciences

1997: Modern cellular & molecular neuroscience UNESCO, Life science international higher education school, Republic of Armenia.

2002: IBRO neuroscience, Physiology Department, Tarbiat Modaress University, Tehran. Iran

2002: Single unite recording, Field potential recording (In Vitro), Kindling model. Physiology Dept. Tarbiat Modaress University

2006: Education in small groups, Shiraz University of Medical Sciences

2006: life Skills, Fasa University of Medical Sciences

2007: Question design, Shiraz University of Medical Sciences

2007: Creativity and innovation, Fasa University of Medical Sciences

2008: First consult, Web of Science, Shiraz University of Medical Sciences

2008: BMJ, Magiran, Endnote, Shiraz University of Medical Sciences

2008: Endnote X2, Shiraz University of Medical Sciences

2008: 2nd power lab workshop in Research and Education and Advanced Techniques in Bio Science, Shaheed Beheshti Medical Science University, Tehran, Iran

2008: ADSL workshop, (DAPA certification), Central Computer School of FASA

2008: Medical Journalism, Shiraz University of Medical Sciences

2009: justification Advisor, Ministry of Health & Medical Education

2009: Search of electronic sources, Fasa University of Medical Sciences

2009: Preliminary SPSS, Shiraz University of Medical Sciences

2009: Advance SPSS, Shiraz University of Medical Sciences

2010: Socially Accountable Medical Education, EDC of Shiraz University of Medical Sciences

2011: Standard exam &Psychometric, EDC of Shiraz University of Medical Sciences

2011: Strategies for Successful Research Writing and Publishing, Research Centre of clinical microbiology, Shiraz University of Medical Sciences

2011: Polymerase Chain Reaction, Fasa University of Medical Sciences

2011: EBSCO&OVID&PMDR&UP TO Date, Fasa University of Medical Sciences

2011: Olympia of Medical Students, Ministry of Health & Medical Education

2012: "Maarefat " Project, Mashhad University of Medical Sciences

2012: "Ziafat Andisheh"Project, Shiraz University

2013 e- workshop "Flowship of electronic learning". Central Excelent Electronic Learning. Shiraz University of Medical Sciences

#### **Conferences Seminars:**

1990: Central roles of A2-noradrenergic activity in TENS induced analgesia The 2th congress of FAOPS, New Delhi, India

1991. Comparing the effects of central A1 & A2 adrenoceptors in TENS Induced analgesia

The 10th Iranian Congress of physiology & pharmacology, Ahvaz University of Medical Sciences

2002: The role of 2 drugs (clonidine &yohimbine) in TENS induced analgesia

10th Congress of Biology, Biology dept. Shiraz University of Medical Sciences

.

2002: Does water-immersion stress cause diabetes mellitus in rat?

15th Congress of Physiology & Pharmacology, Shiraz University of Medical Sciences.

2002: Does restrainer stress cause diabetes mellitus?

FENS, 2002, France

2002: The comparison of immobilization stress & water immersion stress in the induction of diabetes mellitus

5th Scientific Congress FAOPS, Kuala-Lampur, Malaya.

2003: The role of testosterone enanthate on the blood proteins in rat. 16th Congress of Physiology & Pharmacology, Iran University of Medical Sciences.

2003: The effects of testosterone enanthate on tissues of skin& hair in rat. 16th Congress of Physiology & Pharmacology, Iran University of Medical Sciences.

2003: Regulation of ion channels Institute of Physiology 1, Eberhard-Karls-University of Tübingen, Germany

2005: Effects of SGK kinases (1-3) on creatine transporter SLC6A8 expressed in oocytes from X. Laevis; Institute of Physiology I, Eberhard-Karls-University of Tübingen, Germany

Institute of Physiology I, Eberhard-Karls-University of Tübingen, Germany

2006: Type IV secretion:intercellular transfer of macromolecules by systems ancestrally related to conjugation machines

Department of Microbiology, Eberhard-Karls-University of Tübingen, Germany

2006: Stimulation of the creatine transporter SLC6A8 by the serum and glucocorticoid dependent kinases SGK 1 and SGK3

Joint Meeting of the German Physiologic Society and The European Federation of Physiologic Societies 2006 in Munich, March 26 - 29, 2006

2008: Stimulation of the creatine transporter SLC6A8 by the protein kinase mTOR 1th South Asian Conference of Physiological Societies&12th Biennial Conference of Pakistan Physiological Society at Shifa College of Medicine, Islamabad Pakistan 10-12 Nov ,2008

2010: Regulation of the Na, Glucose cotransporter by PIKfyve and the serum and glucocorticoid inducible Kinase SGK1 High Resolution Neuropharmacology,20th neuropharmacology congress San Diego, USA ,10-12Nov ,2010

2011: Down regulation of the creatine transporter SLC6A8 by JAK2, 19th Congress of Physiology & Pharmacology, Hamadan University of Medical Sciences.

2013: Up-regulation of the betaine/GABA transporter (BGT1) by JAK2 21th Congress of Physiology & Pharmacology, Tabriz University of Medical Sciences.

2014: The effect of Anacyclus pyrethrum hydro alcoholic extract on induced epilepsy by pentylene tetrazole in male rat, 3th congress basic and clinical neurosciences, Tehran, October 20-31,2014.

2015: Evaluating of the hydro alcoholic extract effect of Anacyclus Pyrethrum plant on PTZ- induced seizures in male rats
23th Congress of Physiology & Pharmacology, Kashan University of Medical Sciences

2017: The effect of Microwave WiFi Radiation at frequency of 2.4 GH on epileptic Behavior of Rats

In the 6<sup>th</sup> Basic and Clinical Neuroscience Congress ,20-22 Dec .2017 Tehran, Iran

2017: The effect of electromagnetic field of mobile jammer on the blood factors, The 2<sup>nd</sup> International Congress on Hematological Disorders:(New Challenges in Diagnosis and Treatment), Shiraz, Iran

2018: 12th Medical Physic Congress in Shaheed Beheshti University, Tehran, Iran

2018: Evaluating the effect of jammer Radiation on Learning and Memory in male rats

2<sup>nd</sup> International Congress of Physiology and Pharmacology, Chahbahar, Iran

2019: 24<sup>th</sup> Iranian &3<sup>rd</sup> International Congress of Physiology and Pharmacology Shahed University, Tehran, Iran

# Articles :(H index: \ \ \ \)

2002. Effect of ICV injection of GLP-1 and its related peptides on serotonin metabolism & on level of amino acids in the rat hypothalamus. **Brain research**, 1, 2002

2005: Stimulation of the creatine transporter SLC6A8 by the serum and glucocorticoid dependent kinases SGK 1 and SGK3 **Biochemical and Biophysical Research Communications** 334 (2005) 742–746

2006: Stimulation of the creatine transporter SLC6A8 by the protein kinase mTOR **Biochemical and Biophysical Research Communications** 341 (2006) 945–949

2006: Stimulation of the intestinal phosphate transporter SLC34A2 by the protein kinase mTOR

Biochemical and Biophysical Research Communications 345 (2006) 1611–14

2007: PIKfyve in the SGK-1 mediated regulation of the the creatine transporter SLC6A8.

Cellular physiology & Biochemistry ,2007,20

2007: Regulation of the Na+, glucose co-transporter by PIK fyve and the serum & glucocorticoid inducible kinase SGK1.

Biochemical & Biophysical Research Communication (BBRC)2007,359

2011: Stimulation of the glucose carrier SGLT1 by JAK2 Biochemical and Biophysical Research Communications 2011

2011: Down regulation of NaPi-IIa and NaPi-IIb Na+-coupled phosphate transporters by coexpression of Klotho,

Cell Physiol Biochem 2011;27

2012: Down regulation of the creatine transporter SLC6A8 by JAK2, **J membrane Biol**(Accepted)16 Feb. 2012

2012: Up-regulation of the betaine/GABA transporter BGT1 by JAK2, **Biochemical and Biophysical Research Communications** Feb 2012

2012: Up-regulation of Amino Acid Transporter SLC6A19 Activity and surface protein Abandance by PKB/AK & PIKfyve,

Cellular physiol Bioch, Dec,4,2012

2013: Acute and chronic exposure of chick embryo to ethanol alters brain neurosteroid levels,

Journal Physio Biochem 2013; 69:141-145

2013: Stimulation of Na+ coupled phosphate transporter NaPiIIa by janus kinase JAK2.

Biochemical and Biophysical Research Communications. Jan, 2013

2013: Exposure to mobile phone radiation opens new horizons in Alzheimer's disease treatment, **J Biomed Phys Eng**. (short communication)2013;3(3)

2014: Design and Fabrication of Helmholtz Coil to study the effect of pulsed Electromagnetic Fields on the Healing process periodontitis

, **J Biomed Phys** 2014;4(3)

2014: Does exposure to GSM 900 MHzmobile phone radiation affect short term memory of elementary school students,

Journal Pediatric Neurosciences volume 9 /Issue 2 /May-Aug 2014

2014: Effects of hydro-alcoholic extract of broccoli (Brassica *oleracea*) on sensory threshold of pain using the formalin test in adult male rats, **J. Biol.**Today's World. 2014 July; 3 (7): 147-151

2014: Effects of administration of hydro-alcoholic extract of ginger (*Zingiber officinale*) on blood serum cations (Mg, Na +, K+, Ca2 +) and the sex ratio of male and female newborn Wistar rats. **J. Biol. Today's World.2014July;3(7):** 157-161

2015: The Investigation of the protective effects of hydro-alcoholic extract of sea buckthorn (Hippophaerhamnoides L.) in spermatogenesis of rat after exposure of Wi-Fi radiation, *Journal of Paramedical Sciences (JPS)* Summer 2015 Vol.6, No.3 ISSN 2008-4978

2015: Protective Effects of Hydro-alcoholic Extract of Apium Graveolens on Carbon Tetrachloride Induced Hepatotoxicity in Sprague-Dawley male Rats, **Journal of Fasa University of Medical Sciences** L Spring 2015 1 Vol.5 1 No.1

2015: Can the Accuracy of Home Blood Glucose Monitors be affected by the ReceivedSignal Strength of 900 MHz GSM Mobile Phones? *J Biomed Phys Eng* 2015; 5(4)

2016: The Effect of Immobilization Stress on the Induction of Diabetes Mellitus in Rats, **Annals of Military & Health Sciences Research •** Vol 14, No 2, Spring 2016.

2016: GSM 900 MHz Microwave Radiation-Induced Alterations of Insulin Level and Histopathological Changes of Liver and Pancreas in Rat, *J Biomed Phys Eng* 2016; 6(4)

2016: The Fundamental Reasons Why Laptop Computers should not be Used on Your Lap, **J Biomed Phys Eng** 2016; 6(4)

- 2016: Short–Term Exposure to Electromagnetic Fields Generated by Mobile Phone Jammers Decreases the Fasting Blood Sugar in Adult Male Rats *J Biomed Phys Eng* 2016; 6(1)
- 2016: Evaluation of the Protective Role of Vitamin C on the Metabolic and Enzymatic Activities of the Liver in the Male Rats After Exposure to 2.45 GHz of Wi-Fi Routers, *J Biomed Phys Eng* 2016; 6(3)
- 2017: A review of the teratogenic factors effect on embryo, **Journal of Fasa University of Medical Sciences** 6 (4), 426-439
- 2017: The effect of gold and silver nanoparticles on reproductive system: The review article, **Journal of Fasa University of Medical Sciences** 7 (3), 307-316
- 2017: Effects of long-term exposure to radiofrequency radiations emitted by mobile Jammers on reproduction parameters in rats, **Asian Pacific Journal of Reproduction2017,7,1**
- **2018:** Effect of microwave wi-fi radiation at frequency of 2.4 GHz on epileptic behavior of rats, **Journal of biomedical physics & engineering** 8 (2), 185
- 2018: Electromagnetic fields of mobile phone jammer exposure on blood factors in rats, **Journal of biomedical physics & engineering** 8 (4), 403
- 2020: Evaluating the Effect of Jammer Radiation on Learning and Memory in Male Rats, **Journal of Biomedical Physics and Engineering**, 2020/9/6,
- **2020:** Comparison of Trace Elements Levels in Atrial Fibrillation Patients and Healthy Group, **Journal of Pharmaceutical Research International**, 113-119
- 2020: Continuous Swimming Training Arises a Remarkable Effect on Some Longevity Biomarkers in Rat Skeletal Muscles, **Ann Appl Sport Sci** 2020, 8(2)
- 2021: The effect of high-intensity interval training on the expression levels of PGC-1 $\alpha$  and SIRT3 proteins and aging index of slow-twitch and fast-twitch of healthy male rats, **Science and Sports** 36 (2), 170-175
- 2021: Changes in mitochondrial biogenesis and fatty liver indicators in rat following continuous and high intensity interval training. **The Journal of sports medicine and physical fitness** 61 (10), 1416-1422

2021: Does exposure to radiation emitted from mobile jammers influence the spatial memory? **International Journal of Radiation Research** 19 (4), 993-1000

### Thesis supervision or consultation:

- 2011: Advisor in thesis title" The effect of Ethanol on level of hormones estrogens & progesterone & testosterone in brain tissue of chicken embryo"
- 2011: Advisor in thesis title "The Effects of Ultrasound on the Absorption of NPH and Regular Insulin in Normal and Diabetic Rats"
- 2012: Superadvisor of thesis entitled "Estrogenic effect of Glycyrrhiza glabra on hormonal, steriology and histopathology changes in Ovariectomized Rats"
- 2012: Superadvisor of thesis entitled" Evaluation of effect of clove (syzygium aromatcum) on hepatotoxicity induced by thioacetamide in male wistar rats.
- 2012: Superadvisor of thesis entitled" Comparison of the protective effects of hydroalcoholic extract of sea buckthorn ( *Hippophae rhamnoides L.*) in spermatogenesis of rat after exposure of Wi-Fi radiation or treatment with Busulfan drug".
- 2012: Advisor of thesis entitled" entiled" The effect of Brassica oleracea hydroalcoholic extract on pain threshold with formalin test in adult male rat"
- 2013: Advisor in thesis title "The Effect of Apium Graveolens(Celery) Hydroalcoholic Extract on Spermatogenesis of Spirague dawly Rat"
- 2013: Advisor in thesis title "The Effects of Apium Graveolens(Celery) Hydroalcoholic Extract on Hepatotoxicity Induced by Carbon Tetrachloride(CCl4) in Spirague dawly Rat "
- 2013: Superadvisor of thesis entitled"The effect of Anacyclus Pyrethrum hydroalcoholic extract on induced epilepsy by pentilen tetrazol in male rat
- 2014: Super advisor of thesis entitled" Wi-Fi radiation effect on induced epilepsy by pentilen tetrazol in male rat.
- 2014: Super advisor of thesis entitled" Evaluating the effect of jammer radiation on learning level in male rat.

- 2015: Super advisor of thesis entitled" The effect of Anacyclus Pyrethrum hydroalcoholic extract ICV injection on PTZ-induced seizure in male rat.
- 2016: Super advisor of thesis entitled" The effect of polypodium vulgare L hydroalcoholic extract IP injection on PTZ-induced seizure in rat (Running).
- 2018: Super advisor of thesis entitled" Evaluation of the effect of Hydro alcoholic extract of Anacyclus Pyrethrum and Donepezil drug on improvement of animal model of Alzheimer's disease (Running).
- 2018: Super advisor of thesis entitled" Effect of Calendula officinalis Hydroalcoholic Extract on Polycystic Ovarian Syndrome in Female Rat(Running)
- 2019: Super advisor of thesis entitled" The effect of high-intensity interval Training (HIIT)on the expression levels of PGC-and SIRT3 proteins and aging index (GSH: GSSG) of slow- twitch (SOL)and fast twitch (EDL) of healty male rats
- 2022: Super advisor of thesis entitled" Evaluation of male sex hormones, gonadotropin hormones changes & Inhibin B, and evaluating of sperm DNA Fragmentation following receiving two times of high level radioactive iodine in patients with thyroid cancer(Running).

# **Reviewer of scientific papers**

2010: Reviewer of a few scientific abstracts related to Student Festival of Radiobiology, Shiraz University of Medical Sciences

- 2011: Reviewer of a few scientific abstracts related to International Congress of Medaical Physics, Shiraz University of Medical Sciences.
- 2012: Reviewer of a few scientific papers related to Journal of Fasa University of Medical Sciences.
- 2012-2014: Reviewer of several research projects related to The Center for Research in Radiation Science (CRRS), Shiraz University of Medical Sciences
- 2014-2018: Reviewer of eight scientific papers related to Iranian Medical Journal of Shiraz University of Medical Sciences.

2016: Reviewer of seven research projects related to The Center for Research in Radiation Science (CRRS), Shiraz University of Medical Sciences.

## **Membership:**

2000-2014: Member of FAOPS (Federation of Asian and Oceanian Physiological Societies)

20002014: Member of IBRO (International Brain Research Organization)

2000-2014: Member of Iranian society of Physiology & Pharmacology, Tehran ,Iran

2010-2014: Member of The Center for Research on Protection against Ionizing and Nonionizing Radiation, School of Paramedical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

## **Languages other than Persian:**

English, a little German

#### Award:

2012: Top Researcher in Fasa University Medical Sciences

2014: Top Researcher in H-index (9) in Fasa University Medical Sciences