In the Name of God

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CURRICULUM VITAE

- Name: Homeira Zardooz - Nationality: Iranian

- Academic position: Professor

- Academic Training:

Shahid Beheshti University

BSc in Zoology: 1979-1984

Shahid Beheshti University of Medical Sciences

MSc in Physiology: 1992-1996

Jondi Shapour University of Medical Sciences

PhD in Physiology: 2000-2007

- Memberships:

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

Member of the International Brain Research Organization (IBRO).

- Fields of Teaching and Experiences:

Physiology

-Laboratory Experiments on:

Extra Cellular Recording, Stress, Behavioral and Endocrine Physiology

- Publications:

A) Abstracts

- **1-** *Zardooz H., Sahraei H.*, Kashefiolasl B.: Effects of dopamine receptor antagonists on blood glucose in mice. **4th IBRO congress, July 9-14, 1995, Kyoto, JAPAN.**
- **2-** Pourmottabed A., *Sahraei H.*, *Zardooz H*.: The effect of stress on hyperglycemic action of dopaminergic and opioid agonists in mice. **12th Iranian congress of physiology and pharmacology**, **6-9 Nov 1995**, **Tehran**, **IRAN**.
- **3- Zardooz H.,** Manaheji H., Kesmati M., Fathollahi Y.: Cmparison of the effects of clonidine and lidocaine on the frog skin nerve activity. **1st Iranian Congress of Neuroscience, Shaheed Beheshti University of Medical Sciences, Nov 27-29, 1996, Tehran, IRAN.**
- **4-** Manaheji H., **Zardooz H**., Kesmati M., Fathollahi Y.: Effects of clonidine and lidocain in combination on the frog dorsal skin nerve activity in presence of formalin. **13th Iranian Congress of Physiology and Pharmacology, Aug 24-26, 1997, Isfahan, IRAN.**
- **5- Zardooz H.,** Manaheji H., Kesmati M., Fathollahi Y.: Effect of clonidine on the frog dorsal skin nerve activity in presence of formalin. **13th Iranian Congress of Physiology and Pharmacology, Aug 24-26, 1997, Isfahan, IRAN.**
- **6- Zardooz H.**, anaheji H., Kesmati M., Fathollahi Y.: The effects of clonidine and lidocaine on the activity of frog dorsal skin nerve. **13th International Congress of Pharmacology. July 26-31, 1998, Munchen, Germany.**
- **7- Zardooz H.,** Manaheji H., Kesmati M., Fathollahi Y.: The effect of co-administration of lidocaine and clonidine in the presence of formalin on frog dorsal skin nerve. **Joint Congress of FAOPS, FAONS, APPS, PSNZ, 27 Sep- 1 Oct, 1998, Brisbane. Australia.**
- **8- Zardooz H.**, Ghoshooni H., Sahraei H., Zarrindast M.R.: The effect of inhibition of dopamine D2 receptors on conditioned place preference (CPP) induced by morphine in mice. **14th Iranian congress of physiology and pharmacology, May 16-20, 1999, Tehran, IRAN.**

- **9-** Jalili C., *Sahraei H.*, Ghoshooni H., Haeri-Rohani A., Naeini A., *Zardooz H.:* The role of dopaminergic system in induction of conditioned place preference (CPP) by nitric oxide (NO) in mice. **15th Iranian congress of physiology and Pharmacology, Nov 5-8, 2001, Shiraz, IRAN.**
- **10- Zardooz H.**, Sahraei H., Ghoshooni H., Haeri-Rohani A., Naeini A., Jalili C.: The role of nitric oxide (NO) on induction of conditioned place preference (CPP) by morphine in mice. **15th Iranian congress of physiology and Pharmacology, Nov 5-8, 2001, Shiraz, IRAN.**
- **11-** Bahrami F., *Sahraei H.*, Ghoshooni H., Amiri Y., Haeri-Rohani A., *Zardooz H.*: The effects of GABA-A receptors located in ventral tegmental area (VTA) on the expression of morphine-induced conditioned place preference (CPP) in rat. **15th Iranian congress of physiology and Pharmacology, Nov 5-8, 2001**, **Shiraz**, **IRAN**.
- **12-** Amiri Y., *Sahraei H.*, Ghoshooni H., Haeri-Rohani A., *Zardooz H.:* The effects of GABA-B receptors located in ventral tegmental area (VTA) on the expression of morphine-induced conditioned place preference (CPP) in rat. **15th Iranian congress of physiology and Pharmacology, Nov 5-8, 2001**, **Shiraz, IRAN**.
- **13-** Zardooz H., Sahraei H., Oryan Sh., Zarrindast M.R., Hossein-Mardi L.: The effects of beta-adrenergic receptors on the acquisition of nicotine-induced conditioned place preference in mice. **16**th **ECNP Congress, Prague, Sep. 2003.**
- **14-** Zardooz H., Zahedi-Asl S., Gharib-Naseri M.K.: The effect of chronic psychological stress on carbohydrate metabolism in rat. **2nd FAONS Symposium and 3rd Iranian Neuroscience Congress, May 17-19, 2004, Tehran, IRAN**.
- **15-** Zardooz H., Zahedi-Asl S., Gharib-Naseri M.K.: The excitatory effects of glybenclamide on insulin secretion from Langehans islets is glucose dependent. **17th** Iranian Congress of Physiology and Pharmacology, **29 Sep-2 Oct 2005**, Kerman, IRAN.
- **16- Zardooz H**., Hupkens E., Jijakli H.: Tritiated aspartate handling by isolated rat Langerhans' islets. **Belgian Society of Clinical and Fundamental Physiology and Pharmacology meeting**, **18 Nov 2006**, **Brussels**, **Belgium**.
- **17- Zardooz H.**, Rostamkhani F., Zarringhalam J, Faraji F: Metabolic changes after brief exposure to isoflurane, diethyl ether and CO2 in male rats. **19th Iranian Physiology and Pharmacology Congress**, **3-5 Nov 2009**, **Tehran**, **IR.IRAN**

- **18-** Ghalami J., *Zardooz H.*, Rostamkhani F., Farrokhi B: Effects of high fat diet on metabolic factors in male rats: **19th Iranian Physiology and Pharmacology Congress**, **3-5 Nov 2009 Tehran**, **IR.IRAN**.
- **19-** Sahraei H., Ali-Beig H., Ardehari-Ghaleh M., Mohammadian Z., **Zardooz H.**, Salimi SH., Shams J., Noroozzadeh A: Transient inactivation of nucleus accumbens reduces morphine place preference in rats. **21**st **ECNP Congress, August 2010, Amsterdam, The Netherlands.**
- **20-** Zardooz H., Erfani M., Bananaj M., Sahraei H: MATERNAL PSYCHOLOGICAL STRESS CHANGES MORPHINE-INDUCED ANALGESIA IN F2 GENERATION IN MICE. **IUPS Congress, 27 June-1 August 2009, Kyoto, JAPAN.**
- **21-**Tekieh E., *Zardooz H.*, Ramezani M., Sahraei H: Oral morphine consumption delayed fovea development in the Wistar rat embryo eyes probably effects of corticosterone. The 9th Iranian Congress of Anatomical Sciences, May 2010, Hamedan, Iran.
- **22-** Jalili C., Sadeghi Y., **Zardooz H.**, Sahraei H: Morphological changes in basolateral amygdale neurons and astrocyts after nicotine administration in rats. **The 9th Iranian Congress of Anatomical Sciences**, **May 2010**, **Hamedan**, **Iran**.
- **23-** Ranjbaran M., Halataei B., Khosravi M., *Zardooz H.*, Golmanesh L., Sahraei H: Saffron(Crocus staivus L.) water extract and its constituent crocin reduces psychological stress-induced anorexia in mice. **National Symposium of neuroscience**, **16-17 February 2011**, **Gorgan**, **Iran**.
- **24-** Ghanbari A., Halatai B., Khosravi M., Sahraei H., *Zardooz H:* Saffron(Crocus staivus L.)Aqueous extract and its constituent crocin reduce psychological stress-induced anorexia in mice. **National Symposium of neuroscience, 16-17 February 2011, Gorgan, Iran.**
- **25-** *Zardooz H.,* Rostamkhani F., Farrokhi B: The effects of chronic psychological stress on blood factors. **National Symposium of neuroscience, 16-17 February 2011, Gorgan, Iran.**
- **26-** Rostamkhani F., *Zardooz H.,* Farrokhi B:Acute Psychological stress and the alterations of metabolic parameters. **National Symposium of neuroscience, 16-17 February 2011, Gorgan, Iran.**
- **27-** Rostamkhani F., **Zardooz H.,** Farrokhi B. Metabolic and behavioral changes induced by chronic psychological stress. **8**Th **IBRO World Congress of**

- Neuroscience, International Brain Research Organization, 14-18 July 2011, Florence, Italy.
- 28- Rostamkhani F., *Zardooz H.,* Farrokhi B. Insulin response to acute physical stress. 20th Iranian Physiology and Pharmacology Congress, 10-14 October 2011, Hamedan, Iran.
- **29-** *Zardooz H.*, Rostamkhani F., Farrokhi B. Insulin secretion from pancreatic isolated islets in response to chronic stress. **20th Iranian Physiology and Pharmacology Congress**, **10-14 October 2011**, **Hamedan**, **Iran**.
- **30-** Ghalami J., *Zardooz H.*, Rostamkhani F., Farrokhi B, Hedayati M. Combination of high-fat diet and acute foot shock stress effects on lipid metabolism. **20th Iranian Physiology and Pharmacology Congress**, **10-14 October 2011**, **Hamedan**, **Iran**.
- **31-** Zangiabadi H., *Zardooz H.*, Rostamkhani F, Farrokhi B. Acute physical stress effects on Carbohydrate and lipid metabolism. **20th Iranian Physiology and Pharmacology Congress**, **10-14 October 2011**, **Hamedan**, **Iran**.
- **32-** Zardooz H., Rostamkhani F., Farrokhi B. Acute psychological stress and glucose stimulated insulin secretion. The 9th International Congress of Endocrine Disorders, 15-18 November 2011, Tehran, Iran.
- **33-** Rostamkhani F., *Zardooz H.,* Farrokhi B. Chronic psychological stress and insulin secretion from pancreatic isolated islets. **The 9th International Congress of Endocrine Disorders, 15-18 November 2011, Tehran, Iran.**
- **34-** Rostamkhani F., Ghalami J., *Zardooz H.* Insulin secretion from isolated pancreatic islets in response to combination of high-fat diet and physical stress. **IDF 2011, World diabetes congress, 4-8 December 2011, Dubai.**
- **35-** Ghalami J., **Zardooz H.**, Rostamkhani F., Zardooz Z. Combination effects of high-fat diet and acute foot-shock stress on carbohydrate metabolism. **15th Congress of the European Neuroendocrine Association**, **12-15 September 2012**, **Vienna**, **Austria**.
- **36- Zardooz H.**, Ghalami J., Rostamkhani F. Isolated islet insulin secretion in response to psychological stress and high-fat diet. **15th Congress of the European Neuroendocrine Association, 12-15 September 2012, Vienna, Austria.**
- **37-** Rostamkhani F., **Zardooz H.**, Shirvani H. Prenatal stress induces metabolic impairment in adolescent male Wistar rats. **5**th **yazd international congress and student award in reproductive medicine.** April 2013, Yazd, Iran.

- **38** Nemati M., *Zardooz H.*, Rostamkhani F. Metabolic alterations arising from combined application of high-fat diet and chronic stress in male rats. **21**th **International Iranian Congress of Physiology and Pharmacology**, **23-27 August 2013**, **Tabriz**, **Iran**.
- **39-** Fakharzadeh S., **Zardooz H.**, Rostamkhani F. Development of animal model at risk of type 2 diabetes using chronic consumption of high-fat diet. **21th International Iranian Congress of Physiology and Pharmacology**, **23-27 August 2013**, **Tabriz**, **Iran**.
- **40-** Zangiabadi H., Rostamkhani F., *Zardooz H.*, Karbaschi R. Behavioral changes arising from application of acute foot-shock stress. **21th International Iranian Congress of Physiology and Pharmacology, 23-27 August 2013, Tabriz, Iran.**
- **41-** SadeghiMahalli F., *Zardooz H.*, Rostamkhani F., Khodagholi F., Karbalai N. Effects of postnatal stress on glucose metabolismin response to stressin adult male rats. **21th International Iranian Congress of Physiology and Pharmacology, 23-27 August 2013, Tabriz, Iran.**
- **42-** Rostamkhani F., *Zardooz H.,* Shirvani H. The effect of inescapable foot-shock stress in acute and chronic states on insulin and glucose responses in male rats. **21th International Iranian Congress of Physiology and Pharmacology, 23-27 August 2013, Tabriz, Iran.**
- **43-** Zardooz H, Nemati M, Rostamkhani F. The effect of high-fat diet on insulin secretion from isolated islets in response to chronic stress in male rats. **21**th International Iranian Congress of Physiology and Pharmacology, **23-27** August **2013**, Tabriz, Iran.
- **44-** Salimi M., **Zardooz H.**, Rostamkhani F. The effect of chronic physical stress on nutritional behavior in male rats. **21th International Iranian Congress of Physiology and Pharmacology**, **23-27 August 2013**, **Tabriz**, **Iran**.
- **45-** Karbaschi R., Ghalami J., Rostamkhani F., **Zardooz H.** The effect of high-fat diet and acute psychological stress on carbohydrate metabolism in male rats. **21th International Iranian Congress of Physiology and Pharmacology**, **23-27 August 2013**, **Tabriz**, **Iran.**
- **46- Zardooz H.,** Rostamkhani F., Nemati M. The effect of high-fat diet and chronic stress on lipid metabolism. **21th International Iranian Congress of Physiology and Pharmacology, 23-27 August 2013, Tabriz, Iran.**
- **47-** Rostamkhani F., **Zardooz H.** The effect of prenatal stress on metabolic factors in male rat embryo. **21th International Iranian Congress of Physiology and Pharmacology, 23-27 August 2013, Tabriz, Iran.**

- **48** Salimi M., Vasfi H., *Zardooz H*. Metabolic alterations in proestrus and diestrus phases following acute stress exposure in rats. **3rd Congress of Basic and Clinical Neuroscience. 29-31 October 2014, Tehran, Iran.**
- **49-** SadeghiMahalli F., **Zardooz H.**, Khodagholi F. Chronic psychological stress increases pancreatic glucose transporter 2 levels in male young adult rats. **4th International Symposium on Molecular Technology. October 14-16, 2014, Tehran, Iran.**
- **50-** *zardooz H.*, Rostamkhani F., Goshadrou F., Karbaschi R. Investigation of ghrelin secretion from pancreatic isolated islets of stressed male rats. **22nd Iranian Congress of Physiology and Pharmacology 7-11 September 2015, Kashan, Iran**.
- **51-** Zangiabadi H., Vasfi H., Salimi M., *zardooz H.*, Rostamkhani F. High-fat diet effects on plasma leptin and lipid levels in rat's proestrus and diestrus phases. **22nd Iranian Congress of Physiology and Pharmacology 7-11 September 2015**, **Kashan, Iran**.
- **52** Vasfi H., *Zardooz H.*, Rostamkhani F., Salimi M. The effect of high-fat diet combined with acute stress on glucose tolerance in diestrus and proestrus phases of rat estrous cycle. **22nd Iranian Congress of Physiology and Pharmacology 7-11 September 2015, Kashan, Iran**.
- **53** Karbaschi R., **Zardooz H**., Salimi M., Rostamkhani F. Effect of maternal high fatdiet on energy balance in male rat offspring in response to chronic stress. **22nd Iranian Congress of Physiology and Pharmacology 7-11 September 2015, Kashan, Iran**.
- **54** Sadeghimahalli F, **Zardooz H**. The effect of postnatal foot-shock stress on insulin secretion from isolated islets of Langerhans in young adult male rats. **5**th **basic and Clinical Neuroscience Congress 7-9 December 2016, Tehran, Iran.**
- **55-** Karbaschi R., **Zardooz H.**, Sadeghimahalli F. Maternal high-fat diet increased insulin sensitivity in young adult male rat offspring. **9th International Congress of Laboratory and Clinic 23-26 February 2017, Tehran, Iran.**
- **56-** Zardooz H., Karbaschi R., Sadeghimahalli F. High fat feeding during prepregnancy-pregnancy-lactation periods increased insulin resistance in Wistar rats. **9th International Congress of Laboratory and Clinic 23-26 February 2017, Tehran, Iran.**
- **57-** Sadeghimahalli F., **Zardooz H.**, Karbaschi R., Salimi M. Changes in plasma levels of glucose, insulin and corticosterone in exposure to chronic neonatal foot-shock stress in male Wistar rats. **9th International Congress of Laboratory and Clinic 23-26 February 2017, Tehran, Iran.**

- **58-** Salimi M., **Zardooz H.**, Sadeghimahalli F. High-fat diet combined with acute stress increased insulin sensitivity in rat proestrus phase. **9th International Congress of Laboratory and Clinic 23-26 February 2017, Tehran, Iran.**
- **59-** Salimi M., **Zardooz H.**, Sadeghimahalli F. Investigating the combined effect of high-fat diet and acute stress on metabolic factors in proestrus and diestrus phases. **9th International Congress of Laboratory and Clinic 23-26 February 2017, Tehran, Iran.**
- **60-** Maghami S., **Zardooz H.**, Khodagholi F., Hedayati M., Sahraei H. Maternal separation decreased hippocampus insulin content accompanied with blunted spatial memory formation in male rats' offspring. **6th basic and Clinical Neuroscience Congress 20-22 December 2017, Tehran, Iran.**
- **61** Karbaschi R., **Zardooz H.**, Sadeghimahalli F., Khodagholi F., Dagahi L., Arian R. Effects of high-fat feeding during pre-pregnancy, pregnancy and lactation on pancreatic islets' insulin secretion in rat. **International Diabetes Federation Congress 4-8 December**, **2017**, **Abu Dhabi**.
- **62- Zardooz H.,** Sadeghimahalli F., Khodagholi F., Karbaschi R., Sahraei M. Early life stress effects on pancreatic HB9 expression and insulin secretion in chronically stressed young adult rats. **International Diabetes Federation Congress 4-8 December, 2017, Abu Dhabi.**
- **63-** Nemati M., *Zardooz H.*, Rostamkhani F., Karbaschi R. The effect of high-fat diet on insulin secretion and insulin resistance in response to chronic psychological stress in adult male rats. **2 nd International and 23 rd Iranian Congress of Physiology and Pharmacology**, **15-18 Feb. 2018**, **Chabahar**, **Iran.**
- **64-** Karbaschi R., **Zardooz H.**, Salimi M., Arian R. Effect of maternal high fat-diet on plasma corticosterone concentration and adrenal glands weight in response to chronic stress in offspring rats. **2 nd International and 23 rd Iranian Congress of Physiology and Pharmacology**, **15-18 Feb. 2018**, **Chabahar**, **Iran.**
- **65- Zardooz H,** Nemati M, Karbaschi R. Effect of high-fat diet on lipid metabolism in response to chronic psychological stress in adult male rats. **12**th **International Congress of Endocrine Disorders, 14-16 November 2018, Tehran, Iran.**

- **66-** Karbaschi R, Nemati M, **Zardooz H**, Arian R. Investigation of high-fat diet and chronic psychological stress interaction on energy balance in adult male rats. **12th International Congress of Endocrine Disorders, 14-16 November 2018, Tehran, Iran.**
- **67-** Karbaschi R, Nemati M, **Zardooz H**, Rostamkhani F, Arian R. Comparison between the effects of chronic unpredictable electrical and emotional stress on metabolic parameters in adult male rats. **11th International Congress of Laboratory & Clinic, 16-18 Jan 2019, Tehran, Iran.**
- **68- Zardooz H,** Sadeghimahalli F, Karbaschi R. Early life stress reduced pancreatic HB9 protein expression along with plasma corticosterone and TNF- a elevation in young adult male rats. **11th International Congress of Laboratory & Clinic, 16-18 Jan 2019, Tehran, Iran.**
- **69** Zardooz H, Maghami S, Karbaschi R, Salimi M, Sadeghimahalli F. Chronic maternal separation impaired glucose-dependent insulin secretion from pancreatic islets. **9**th **FAOPS Congress, 28-31 March 2019, Kobe, Japan.**
- **70-** Sadeghimahalli F, **Zardooz H**, Salimi M, Karbaschi R. Postnatal stress induces morphological changes in islets of Langerhans in stressed adult male rats. **9th FAOPS Congress**, **28-31 March 2019**, **Kobe**, **Japan**.
- **71-** Salimi M, Sadeghimahalli F, **Zardooz H**, Khodagholi F, Shaerzadeh F, Karbaschi R. Early life stress effect on pancreatic PDH level and Krebs cycle enzymes activity in young adult rat. **9th FAOPS Congress**, **28-31 March 2019**, **Kobe**, **Japan**.
- **72-** Karbaschi R, **Zardooz H**, Salimi M, Sadeghimahalli F, Arian R. Effect of maternal high-fat diet on HB9 expression and pancreatic insulin secretion in male rats. **9**th **FAOPS Congress, 28-31 March 2019, Kobe, Japan.**
- **73- Zardooz H**, Karbaschi R, Maghami S, Binayi F, Ranjbar Saber R. Early postnatal maternal deprivation affected maternal care and offspring body mass index. **3rd International and 24 th Iranian Congress of Physiology and Pharmacology. 30 October- 1 November 2019, Tehran, Iran.**
- **74** Karbaschi R, **Zardooz** H, Arian R. High-fat feeding before, during and after pregnancy affects HPA axis activity in rats. **3rd International and 24 th Iranian Congress of Physiology and Pharmacology. 30 October- 1 November 2019, Tehran, Iran.**

- **75** Shahsavar P, Ranjbar R, Eskandari F, Maghami S, **Zardooz H**. Chronic early life maternal deprivation induced depressive like behavior in young adult male rats. **3rd International and 24 th Iranian Congress of Physiology and Pharmacology. 30 October- 1 November 2019, Tehran, Iran.**
- **76-** Sadeghimahalli F, **Zardooz H**, Salimi M. The effect of adulthood psychological stress on number or area of Langerhans islets and pancreatic glut2 levels in rats exposed to early life stress. **3rd International and 24 th Iranian Congress of Physiology and Pharmacology. 30 October- 1 November 2019, Tehran, Iran.**
- **77-** Eskandari F, **Zardooz H**, Hedayati M. The Influence of Maternal Separation on Depressive Symptoms and Energy Homeostasis in Young Adult Male Rat Offspring Subjected to Chronic Social Defeat Stress. **The fourth international Congress of Turkish neuroendocrinology society. November 2020**, **Istanbul**, **Turkey**.
- **78-** Binayi F, **Zardooz H**, Ghasemi R, Hedayati M, Askari S, Pouriran R. Chronic High-Fat Diet Affected Plasma and Hippocampal Corticosterone and Insulin Levels as well as Spatial Memory in Adult Male Rats: Endoplasmic Reticulum Stress Involvement. **The fourth international Congress of Turkish neuroendocrinology society. November 2020, Istanbul, Turkey.**
- **79-** Kalantar S, **Zardooz H**, Binayi F. The effect of hepatic oxidative stress induced by long term consumption of a high-fat diet on the hepatic content of insulin degrading enzyme in adult male rat. **The 13th International Congress of Endocrine Disorders. November 2021, Tehran, Iran.**
- **80-** Shirzadeh Barough S, **Zardooz H**, Binayi F, Salimi M, Siavoshi F, Khodagholi F, Hedayati M. Postnatal stress combined with saffron extract induces insulin resistance. **The 13th International Congress of Endocrine Disorders. November 2021, Tehran, Iran.**
- **81-** Binayi F, **Zardooz H**, Khodagholi F, Hedayati M. Long-term high-fat diet caused lipid metabolism impairment and systemic inflammation through the induction of endoplasmic reticulum stress in adult male rats. **The 13th International Congress of Endocrine Disorders. November 2021, Tehran, Iran.**
- **82-** Eskandari F, **Zardooz H**, Hedayati M. Investigation of the effects of maternal separation on glucose stimulated insulin secretion and content of pancreatic isolated islets along with beta cell numbers in young adult male rat offspring in response to chronic social defeat stress. **The 13th International Congress of Endocrine Disorders. November 2021, Tehran, Iran.**
- **83-** Izadi MS, Eskandari F, Binayi F, Dargahi L, **Zardooz H**. High-fat-fructose feeding from birth to adulthood impaired glucose tolerance and insulin secretion and content in

rats. International Diabetes Federation (IDF) Congress. December 2022, Lisbon.

84- Eskandari F, **Zardooz H**, Hedayati M. Maternal separation intensified HPA axis and metabolic dysregulations in chronic social defeated adult male rats. **International Diabetes Federation (IDF) Congress. December 2022, Lisbon.**

B) Papers

- **1- Zardooz H.,** Shardi-Manheji H., Kesmati M., Fathollahi Y.: Effect of clonidine on electrical activity induced by formalin on frog dorsal skin sensory nerve. **Physiology and Pharmacology**, 1999; 3: 39-44, [Farsi].
- **2-** Sahraei H., Nasiri A., Dastamooz A., Hossein-Mardi L., Yari M., Ghoshooni H., **Zardooz H**.: Evaluation of the effect of ascorbic acid on the acquisition and expression of morphine-induced conditioned place preference in mice. **Physiology and Pharmacology**, 2001; 5: 205-212, [Farsi].
- **3-** Sahraei H., Amiri Y., Haeri-Rohani A., Ghoshooni H., **Zardooz H**.: Different effects of tegmental GABAergic receptors on the expression of morphine-induced place preference in rat. **Physiology and Pharmacology**, 2002; 6: 199-208, [Farsi].
- **4-** Pourmotabbed A., Rostamian B., Manouchehri G., Pirzadeh-Jahromi G., Sahraei H., Ghoshooni H., **Zardooz H.**, Kamalnejad M.: Effects of papaver rhoeas extract on the expression and development of morphine-dependence in mice. **J Ethnopharmacology**, 2004; 95: 431-435.
- **5-** Sahraei H., Zarei F., Oryan S., Eidi M., **Zardooz H.**, Shams J.:The role of nitric oxide within the nucleus accumbens on morphine incentive tolerance in rats. **Physiology and Pharmacology**, 2005; 8: 115-123 [Farsi].
- **6-** Sahraei H., Gholami A., Ghoshooni H., Haeri-Rohani A., **Zardooz H**.: Study of inhibitory effects of nicotine on the expression of morphine-induced conditioned place preference in mice. **Modarres Journal of Medical Sciences**, 2004; 7: 61-68 [Farsi].
- **7-** Sahraei H., Faraji N., Ghoshooni H., Rostami P., Zarrindast M.R., **Zardooz H.**: Sensitization and cross-sensitization to morphine and nicotine in induction of conditioned place preference in mice. **Kowsar Medical Journal**, 2005; 9: 253-259 [Farsi].
- 8- Sahraei H., Amiri Y., Haeri-Rohani A., Sepehri H., Salimi S.H., Pourmotabbed A.,

- Ghoshooni H., **Zardooz H.:** Different effects of GABAergic receptors located in the ventral tegmental area (VTA) on the expression of morphine-induced conditioned place preference in rat. **European Journal of Pharmacology**, 2005; 524: 95-101.
- **9- Zardooz H.**, Zahedi Asl S., Gharib Naseri M.K., Hedayati M.: Effect of chronic psychological stress on carbohydrate metabolism in rat. **Pejouhesh**, 2006; 29: 343-350 [Farsi].
- **10- Zardooz H.**, Zahedi Asl S., Gharib Naseri M.K.: Effect of chronic psychological stress on insulin secretion from isolated pancreatic islets in rat. **Iranian Journal of Endocrinology and Metabolism**, 2006; 7: 355-363 [Farsi].
- **11- Zardooz H.**, Zahedi Asl S., Gharib Naseri M.K.: Effect of chronic psychological stress on insulin release from rat isolated pancreatic islets. **Life Sciences**, 2006; 79: 57-62.
- **12- Zardooz H.**, Zahedi Asl S., Gharib Naseri M.K., Hedayati M.: Effect of chronic restraint stress on carbohydrate metabolism in rat. **Physiology and Behavior**, 2006; 89: 373-378.
- **13-** Aliabadi A.A., Sahraei H., Sadooghi M., Ghoshooni H., Salimi S.H., Barzegari A.A., Hossein-Mardi L., Yari M., Faraji N, **Zardooz H**., Shams J.: Ascorbic acid antagonizes nicotine-induced place preference and behavioral sensitization in mice. **Physiology and Pharmacology**, 2006; 10: 49-56 [Farsi].
- **14-** Sahraei H., Shams J., Faghih-Monzavi Z., **Zardooz H.**, Pashaei-Rad S., Kamalinejad M.: Effects of *Papaver Rhoeas* extract on the development and expression of tolerance to morphine-induced locomotor activity in mice. **Pharmaceutical Biology** 2007; 45: 475-480.
- **15-** Sahraei H., Aliabadi A.A., Zarrindast M.R., Ghoshooni H., Barzegari-Sorkheh A.B., Yari M., **Zardooz H.**, Hossein-Mardi L., Faraji N., Shams J.: Ascorbic acid antagonizes nicotine-induced place preference and behavioral sensitization in mice. **European Journal of Pharmacology**, 2007; 560: 42-48.
- **16- Zardooz H.**, Zahedi Asl S., Gharib Naseri M.K: The effect of chronic psychological stress on the function of glibenclamide on insulin release from rat isolated pancreatic islets in the presence of glucose. **Iranian Journal of Diabetes and Lipid,** 2006; 17 (4): 309-318.
- **17-** Sahraei H., Aliabadi A.A., Zarrindast M.R., Ghoshooni H., Barzegari-Sorkheh A.B., Yari M., **Zardooz H.**, Hossein-Mardi L., Faraji N., Shams J.: Ascorbic acid antagonizes

nicotine-induced place preference and behavioral sensitization in mice. **European Journal of Pharmacology**, 2007; 560: 42-48.

- **18-** Sahraei H., Shams J., Faghih-Monzavi Z., **Zardooz H.**, Pashaei-Rad S., Kamalinejad M.: Effects of *Papaver Rhoeas* extract on the development and expression of tolerance to morphine-induced locomotor activity in mice. **Pharmaceutical Biology**, 2007; 45: 475-480.
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- Thesis:

- -Zardooz H.: Comparison of the effect of clonidine and lidocaine in the presence of formalin on electrical activity of frog dorsal skin nerve. (MSc)
- -Zardooz H.: Effects of psychological stress (restraint) on carbohydrate metabolism (In Vivo) and insulin secretion from isolated pancreatic islets (In Vitro) in rat. (PhD)

- Teaching Experiences:

Teaching courses of Physiology and Experimental works for MSc and PhD students

- Research works:
- -Comparison of the effect of psychological and physical stress induced by communication box on insulin release from rat isolated islets of Langerhans.
- -The effect of inhaled anesthetics on plasma corticosterone concentration in male rats
- -The effect of psychological and physical stress on plasma ghrelin level and ghrelin secretion from pancreatic isolated islets in male rat.
- -Comparison of the effect of psychological and physical stress on oxidative stress biomarkers in rat liver
- -The interaction effects of high fat diet and acute stress (psychological and physical) on metabolic factors and insulin release from pancreatic isolated islets in male rat.
- -The interaction effects of high fat diet and chronic stress (physical) on metabolic factors and insulin release from pancreatic isolated islets in male rat
- -The effects of chronic stress during pregnancy period on insulin secretion from isolated islets of Langerhans in male offspring rats
- -Evaluation the effects of DIBc nano complex on glucose and lipid metabolism in streptozotocin-high fat induced diabetic rat

- -Study the effect of early- life stress on glucose transporter 2 expression and insulin secretion from isolated islets of Langerhans in male adult stressed rats
- -Study the effect of maternal high-fat diet on insulin secretion from pancreatic isolated islets of Langerhans in male rat offspring in response to chronic stress
- -Study of postnatal stress effects on the expression of pancreatic HB9 transcription factor and glucose metabolism in response to adulthood stress in male rats
- -Study of maternal high-fat diet effects on glucose transporter-2 expression in pancreas of male rat offspring in response to chronic stress
- -Assessment of maternal separation effect on insulin content and secretion from pancreatic islets, and their relation to hippocampus insulin content and spatial memory, in adult male rats
- -Investigation of postnatal stress effect on oxidative stress indices and anxiety behavior in young adult male rat offspring: possible protective role of saffron extract
- -Study the effect of high-fat diet with or without exposure to chronic psychological stress on plasma leptin and corticosterone levels and insulin secretion from pancreatic isolated islets in male rats
- -Investigating the combined effect of high-fat diet and acute stress on insulin secretion from pancreatic isolated islets of rats in proesrtus and diestrus phases
- -Study the changes of glucose metabolism induced by combined application of high-fat diet and foot-shock stress in female rats
- -Investigation of long term consumption of a high-fat diet effect on ER stress induction and WFS1 expression in pancreatic islets of male rats
- Investigation of maternal stress effect, with receiving vitamin E, on pancreatic islets' oxidative stress indices and insulin secretion in young adult male rat offspring

- Investigation of the effect of high fat diet consumption during pregnancy and lactation on endoplasmic reticulum stress induction and WFS1 expression in pancreatic islets of male rat offspring
- Investigation of long term consumption of a High Fat Diet effect on content of insulin and corticosterone and the activity of the insulin receptor in hippocampus and the role of possible changes of these factors in male rats' spatial memory
- To assess the time course effects of high fat diet on the activity of MAPKs components and insulin signaling pathway in the hippocampus of male adult rats
- The study of early life and young adulthood stress effect on pancreatic PDH expression and α ketoglutarate dehydrogenase and aconitase activity in young adult male rat offspring
- Investigation of long term consumption of a High Fat Diet effect on plasma lipid profile and possible induction of inflammation in adult male rats
- Investigation the effect of maternal separation stress on oxidative stress markers in young adult male rat offspring in response to chronic social defeat stress
- Investigation of high-fat high-carbohydrate diet effects on pancreatic endoplasmic reticulum stress, Langerhans islets' Wfs1 expression and insulin content and secretion along with metabolic syndrome model induction in adult male rats
- Investigation of variable stress effect during pre-pregnancy, pregnancy and lactation periods on induction of endoplasmic reticulum stress, WFS1 epigenetic changes and expression level and insulin secretion from pancreatic Langerhans islets in adult male rat offspring
- -Investigating the effect of maternal separation stress on the induction of depressive-like behavior and spatial memory impairment in response to chronic social defeat stress along with the assessment of HPA axis activity and hippocampal IL-1 β level in adult male rat

- The effect of high-fat-high-carbohydrate diet and 4-phenylbutyric acid on serum and pancreatic PANDER levels of adult male rats
- Investigation and comparison of the effect of high-fat high-carbohydrate diet on hippocampal inflammation and spatial memory and learning of adult male rats in two behavioral tests of Morris water maze and Barnes maze
- Study the effect of long term consumption of a high-fat diet and 4-phenyl butyric acid on the hepatic oxidative stress biomarkers and content of insulin degrading enzyme in adult male rat
- Evaluation of the effect of stress during prepregnancy, pregnancy and lactation periods on lipid profiles and inflammation of the hippocampus and the role of possible changes of these factors in anxiety, depression and spatial memory in male rat offspring
- Study the effect of Royal Jelly on oxidative stress markers, insulin secretion rate and spatial memory in adult male rats model of chronic unpredictable stress
- -Supervisor

1- MSc students:

- The interaction effects of high fat diet and acute stress (psychological and physical) on metabolic factors and insulin release from pancreatic isolated islets in male rat. 2010
- Study of high-fat diet (intra-abdominal cow fat) effects on insulin release from isolated islets of Langerhans (in vitro) and metabolic factors (in vivo) in male rats in the presence of chronic electrical shock. 2013
- Evaluation of the effects of DIBc nano complex on glucose and lipid metabolism in streptozotocin-high fat induced diabetic rats. 2014
- -Assessment of changes in glucose metabolism arising from high-fat diet consumption combined with acute electric foot-shock stress in female rats. 2014
- -Investigating the combined effect of high-fat diet and acute stress on

insulin secretion from pancreatic isolated islets of rats in proesrtus and diestrus phases. 2015

- -Assessment of maternal separation effect on insulin content and secretion from pancreatic islets, and their relation to hippocampus insulin content and spatial memory, in adult male rats. 2016
- Investigation of maternal stress effect on inflammatory and oxidative stress markers and pancreatic isolated islets' insulin secretion in male rat offspring: The possible protective role of vitamin E. 2020
- Investigating the effect of royal jelly on insulin secretion impairment induced by oxidative and endoplasmic reticulum stress following exposure to chronic unpredictabe stress in adult male rats. 2020

Advisor:

To assess the time course effects of high fat diet on the activity of MAPKs components and insulin signaling pathway in the hippocampus of male adult rats. 2017

2- PhD students:

- -The effects of chronic electrical foot-shock and psychological stress during development of pancreas and whole pregnancy period on insulin secretion ability of Langerhans isolated islets in male offspring rats. 2013
- -Study of early-life stress effect on glucose transporter 2 levels and insulin secretion from isolated islets of Langerhans in stressed young adult male rats. 2014
- -Study the effect of maternal high-fat diet on glucose transporter-2 expression and insulin secretion from pancreatic isolated islets of Langerhans in male rat offspring in response to chronic stress. 2016
- Investigation of long term consumption of a High Fat Diet effect on ER stress induction and alteration of WFS1 expression in relation to pancreatic isolated islets' insulin content and secretion in male rat. 2021
- -Investigation the effect of maternal separation stress on neuroendocrine and metabolic response to chronic social defeat stress along with evaluation of

expression alterations of CRHR1 and FKBP5 and epigenetic modifications of FKBP5 in hypothalamus of young adult male rat offspring 2022

- Evaluation of the effect of prepregnancy, pregnancy and lactation stresses on ER stress, WFS1 and GLUT-2 expressions and methylation and insulin secretion of pancreatic isolated Langerhans islets in male rat offspring 2022
- -Investigation of high-fat high-carbohydrate diet effects, with and without 4-phenylbutyric acid, on pancreatic Langerhans islets' Wfs1 expression and insulin content and secretion as well as metabolic syndrome model induction in adult male rats 2023
- -Investigation of the effect of maternal high fat diet during pregnancy and lactation on ER stress induction and Wfs1 expression in pancreatic islets of male rat offspring
- -Investigating high-fat-high-fructose diet consumption effect during fetalneonatal and adulthood periods on unfolded protein response (UPR) pathway components expression in pancreatic tissue, induction of leptin resistance and glucose homeostasis in male rat offspring

Advisor:

- Effects of nitrite administration on insulin secretion from isolated pancreatic islets and insulin resistance in obese type 2 diabetic rats. 2018

3- Medical students:

- -Study the effect of hepatic oxidative stress induced by long term consumption of a high-fat diet on the hepatic content of insulin degrading enzyme in adult male rat: Evaluation of the possible modulatory effect of 4-phenylbutyric acid 2021
- Study the effect of maternal stress during pregnancy and lactation on hypothalamic inflammatory status and leptin content and possible changes of energy balance in adult rat offspring 2022
- Study the effect of maternal stress during pregnancy and lactation on HPA axis

activity and incidence of liver oxidative stress in adult rat offspring 2022

- Investigating the effect of maternal separation stress on lipid profile, peripheral and central leptin content and incidence of depressive like behavior in pubertal male rat offspring subsequent to chronic social defeat stress exposure 2023