In the name of GOD

CURRICULUM VITAE (CV)

Dr Fariba Ghiasi

Associate Professor of Physiology, Tabriz University of Medical Sciences, Tabriz, Iran.

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Academic Training:

B.Sc in Nursing, Tabriz University, Tabriz, Iran

M.Sc in human Physiology, Kerman University, Tabriz, Iran

Ph.D in human Physiology, Tabriz University, Tabriz, Iran.

Theses:

M.Sc thesis title: Evaluating the Effect Of Mebudipine On Hemodynamical, Electerical And Histological Changes And Its Possible Mechanisms In Isolated Heart induced by Ischemic-Reperfusion injury in male rats

Ph.D thesis title: Evaluating the effect of swimming exercise on pancreatic inflammatory miRs signaling (miR-34a and miR146a) in type 2 diabetic male rats.

Membership of societies:

Ordinary member of Iranian Physiology and Pharmacology since 2005

Awards

The third rank for the Best Article in first national congress on Endothelium, Isfahan University of Medical Sciences, Isfahan-Iran, 2009.

Courses taught:

- 1. Teaching all fields of Medical Physiology (theory and applied courses) in Tabriz University of Medical Sciences to the following students and levels:
- 2. Residents: residents of Dentistry
- 3. Doctoral level: students of Medicine, Dentistry (applied course) and Pharmacy (theory and applied courses)
- 4.. MSc level: Master students of, Biophysics, Anatomy, Biomedical Engineering, Medicinal Chemistry,...
- 5. Bachelor level: students of faculty of Nursing and Midwifery; students of faculty of Nutrition and Health; students of faculty of Rehabilitation; students of faculty of Paramedicine and Laboratory Sciences..
- 6. Teaching all fields of Medical Physiology (theory and applied courses) in Islamic Azad University of Tabriz to students of Medicine, Nursing, Midwifery and Laboratory Sciences:
- 7. Teaching all fields of Physiology (theory and applied courses) in Azad University of Ahar.

Research Experiences and Skills

- 1. Isolated perfused heart in Langendorff set-up
- 2. Organ bath perfusion of isolated tissues
- 3. Myocardial infarction induction models in rat
- 4. Ischemia-reperfusion injury of the heart
- 5. Research methodology and scientific writing
- 6. ELISA
- 7. Real Time PCR

Work Experiences

- 1 Academic Member in Department of Physiology, Faculty of Medicine, Tabriz University of Medical Science, Iran, 2016 up now.
- 3. Executive co-operator in 16th Iranian congress of physiology and pharmacology, Tarbiat-Modarres University, Tehran-Iran, 2003.
- 4. Executive and co-operator agent in 21th Iranian congress of physiology and pharmacology, Tabriz University of Medical Sciences, Tabriz-Iran, 2013.

5. Coordinator-manager of Journal Clubs meetings in Department of Physiology, Tabriz University of Medical Sciences, from 2017.

Workshops (Participant)

- 1. Research on Behavioral Sciences; Kerman University of Medical Sciences, Kerman-Iran
- 2. Teaching Methods; University of Applied Science, Tabriz-Iran
- 3. Article Writing; TabrizUniversity of Medical Sciences, Tabriz-Iran...
- 4. Research Methodology and Search Database; Tabriz University of Medical Sciences, Tabriz-Iran.
- 5. Principles and Applications of Real time polymerase chain reaction (RT-PCR); Biotechnology Research Center, Tabriz University of Medical Sciences, Tabriz-Iran.
- 6. Electrophysiological Recording techniques (patch clamp); Tarbiat Modarres University of
- 7. Article Reviewing; Tabriz University of Medical Sciences, Tabriz-Iran.
- 8. Ethics in Medical Research (Experimental, Clinical and Epidemiological Research)); Tabriz University of Medical Sciences, Tabriz-Iran...
- 9. Western Blotting; Tabriz University of Medical Sciences, Tabriz-Iran.

Publications, Articles in International Journals

- 1. Abedini F, Rahbarghazi R, Hamidian G, Ghaffari-Nasab A, Ahmadi M, Giassi F, Keyhanmanesh R. Bone marrow c-kit+ cells injected intravenously improved the sperm parameters and stereological changes in the testes of type 2 diabetic rats. Tissue and Cell. 2025 Jul 21:103048.
- 2. Kharazi U, Salmani N, Oghbaei F, Hamidian GR, Ghaderpour S, Ghiasi F, Keyhanmanesh R. Voluntary exercise prevents high-fat diet-induced male infertility in rats by preserving blood-testis barrier integrity and sperm parameters. Hormone Molecular Biology and Clinical Investigation. 2025 Sep 23;46(3):119-31.
- 3. Mohammadzadeh M, Athari SZ, Ghiasi F, Keyhanmanesh R, Ghaffari-Nasab A, Roshangar L, Korjan ES, Delkhosh A, Bavil FM. Bone Marrow-Derived C-Kit+ Cells Improved Inflammatory IL-33/ST-2/ILC2 Axis in the Lung Tissue of Type 2 Diabetic Rats. Applied Biochemistry and Biotechnology. 2024 Oct;196(10):7074-88.

- 4. Sarmadi R, Lotfi H, Hejazi MA, Ghiasi F, Keyhanmanesh R. The role of probiotics on microvascular complications of type-2 diabetes: Nephropathy and retinopathy. Journal of cardiovascular and thoracic research. 2024 Jun 25;16(2):65.
- 5. Fallahi S, Zangbar HS, Farajdokht F, Rahbarghazi R, Ghiasi F, Mohaddes G. Mesenchymal stem cell-derived exosomes improve neurogenesis and cognitive function of mice with methamphetamine addiction: A novel treatment approach. CNS Neuroscience & Therapeutics. 2024 May;30(5):e14719.
- 6. Fallahi S, Zangbar HS, Farajdokht F, Rahbarghazi R, Mohaddes G, Ghiasi F. Exosomes as a therapeutic tool to promote neurorestoration and cognitive function in neurological conditions: Achieve two ends with a single effort. CNS Neuroscience & Therapeutics. 2024 May;30(5):e14752.
- 7. Abriz AE, Araghi A, Nemati M, Narmi MT, Ahmadi M, Abedini F, Keyhanmanesh R, Ghiasi F, Rahbarghazi R. Docosahexaenoic acid reduced vascular endothelial cell injury in diabetic rats via the modulation of autophagy. Advanced Pharmaceutical Bulletin. 2024 Mar 20;14(2):412.
- 8. Ghaffari-Nasab A, Ghiasi F, Keyhanmanesh R, Roshangar L, Salmani Korjan E, Nazarpoor N, Mirzaei Bavil F. Bone marrow-derived c-kit positive stem cell administration protects against diabetes-induced nephropathy in a rat model by reversing PI3K/AKT/GSK-3 β pathway and inhibiting cell apoptosis. Molecular and Cellular Biochemistry. 2024 Mar;479(3):603-15.
- 9. Fallahi S, Zangbar HS, Farajdokht F, Rahbarghazi R, Mohaddes G, Ghiasi F. Correction to Exosomes as a therapeutic tool to promote neurorestoration and cognitive function in neurological conditions: Achieve two ends with a single effort. CNS Neurosci Ther. 2024 May; 30 (5): e14752. doi: 10.1111/cns. 14752. CNS Neurosci Ther. 2024;30:e14844.
- 10. Athari SZ, Bavil FM, Keyhanmanesh R, Lotfi H, Sajed Y, Delkhosh A, Ghiasi F. Voluntary exercise improves pulmonary inflammation through NF-κB and Nrf2 in type 2 diabetic male rats. Iranian Journal of Basic Medical Sciences. 2024;27(1):74.
- 11. Ghaderpour S, Shekarchi AA, Rahbar S, Ghiasi F. Pathological and structural study of cardiac striated muscle and quadriceps along with the study of microscopic changes in liver, kidney and lung tissue following short-term and long-term resistance exercises in male rats. Medical Journal of Tabriz University of Medical Sciences. 2023 Oct 16;45(5):435-46.
- 12. Ghiasi F, Mesgari-Abbasi M, Khordadmehr M, Imani S, Hosseinzadeh F. Chronic kombucha beverage consumption attenuates inflammatory markers and

- histopathology of brain tissue in transnet global brain ischemia in rats. Neurochemical Research. 2023 Oct;48(10):3202-11.
- 13. Ghaderpour S, Keyhanmanesh R, Hamidian G, Heydari H, Ghiasi F. The effects of voluntary exercise on histological and stereological changes of sciatic nerve, nitric oxide levels, and peripheral neuropathy caused by high-fat diet-induced type 2 diabetes in male rats. Behavioural Brain Research. 2023 Aug 5;451:114507.
- 14. Alizadeh F, Mirzaie Bavil F, Keyhanmanesh R, Lotfi H, Ghiasi F. Association of pro-inflammatory cytokines, inflammatory proteins with atherosclerosis index in obese male subjects. Hormone Molecular Biology and Clinical Investigation. 2023 Jun 30;44(2):121-6.
- 15. Rezaie J, Aboulhassani A, Keyhanmanesh R, Rahbarghazi R, Delkhosh A, Salimi L, Zamani AN, Rahbarghazi A, Ahmadi M, Ghiasi F. Effect of voluntary wheel running on autophagy status in lung tissue of high-fat diet-fed rats.

 Comparative Exercise Physiology. 2023 Apr 3;19(2):175-81.
- 16. Ghaderpour S, Ghiasi R, Heydari H, Keyhanmanesh R. The relation between obesity, kisspeptin, leptin, and male fertility. Hormone Molecular Biology and Clinical Investigation. 2022 Jun 1;43(2):235-47.
- 17. Abedini F, Giassi F, Rahbarghazi R, Hamidian G, Keyhanmanesh R. Using Stem cells to Treat diabetes-induced infertility. Current Diabetes Reviews. 2023 Sep 1;19(7):28-34.
- 18. Salmany N, Lotfi H, Keyhanmanesh R, Ghiasi R. An overview of potential applications for nanotechnology, probiotics, and medicinal plants in infertility problems. Current Women's Health Reviews. 2023 Nov 1;19(4):91-106.
- 19. Kharazi U, Keyhanmanesh R, Hamidian GR, Ghaderpour S, Ghiasi R. Voluntary exercise could reduce sperm malformations by improving hypothalamus-hypophysis-gonadal axis and kisspeptin/leptin signaling in type 2 diabetic rats. Iranian Journal of Basic Medical Sciences. 2021 Dec;24(12):1624.
- 20. Heydari, H., Ghiasi, R., Hamidian, G., Ghaderpour, S. and Keyhanmanesh, R., 2021. Voluntary exercise improves sperm parameters in high fat diet receiving rats through alteration in testicular oxidative stress, mir-34a/SIRT1/p53 and apoptosis. *Hormone Molecular Biology and Clinical Investigation*.
- 21. Alipour, M.R., Naderi, R., Alihemmati, A., Sheervalilou, R. and Ghiasi, R., 2020. Swimming training attenuates pancreatic apoptosis through miR-34a/Sirtu in1/P53 Axis in high-fat diet and Streptozotocin-induced Type-2 diabetic rats. *Journal of Diabetes & Metabolic Disorders*, 19(2), pp.1439-1446.
- 22. Gaderpour, S., Ghiasi, R., Hamidian, G., Heydari, H. and Keyhanmanesh, R., 2021. Voluntary exercise improves spermatogenesis and testicular apoptosis in type 2

- diabetic rats through alteration in oxidative stress and mir-34a/SIRT1/p53 pathway. *Iranian Journal of Basic Medical Sciences*, 24(1), p.58.
- 23. Ali-Aghdam, A., Karimi-Sales, E., Mahmoudi, J., Ghiasi, R. and Alipour, M.R., 2020. Immunomodulator Drug (IMODTM) and Exercise Improve Cardiac Oxidative Stress and Antioxidant Balance in Diabetic Rats. *Jundishapur Journal of Natural Pharmaceutical Products*, 15(3).
- 24. Ghazipour, A.M., Shirpoor, A., Ghiasi, R., Pourheydar, B., Khalaji, N. and Naderi, R., 2020. Cyclosporine A induces testicular injury via mitochondrial apoptotic pathway by regulation of mir-34a and sirt-1 in male rats: The rescue effect of curcumin. *Chemico-biological interactions*, 327, p.109180.
- 25. Naderi, R., Pourheydar, B., Ghiasi, R. and Shafiei, F., 2020. Modulatory effect of tropisetron in the liver of streptozotocin-induced diabetes in rats: biochemical and histological evidence. *Hormone molecular biology and clinical investigation*, *41*(3).
- 26. Ghiasi, R., Alihemmati, A. and Naderi, R., 2020. The impacts of garlic and voluntary training alone or together on myocardial miR-126 and miR-210 gene expressions and angiogenesis in healthy rats. *Journal of cardiovascular and thoracic research*, 12(3), p.195.
- 27. Heydari, H., Ghiasi, R., Ghaderpour, S. and Keyhanmanesh, R., 2021. The mechanisms involved in obesity-induced male infertility. *Current Diabetes Reviews*, 17(3), pp.259-267.
- 28. Karimi-Sales, E., Alipour, M.R., Naderi, R., Hosseinzadeh, E. and Ghiasi, R., 2019. Protective effect of trans-chalcone against high-fat diet-induced pulmonary inflammation is associated with changes in miR-146a and pro-inflammatory cytokines expression in male rats. *Inflammation*, 42(6), pp.2048-2055.
- 29. Alipour, M.R., Yousefzade, N., Bavil, F.M., Naderi, R. and Ghiasi, R., 2020. Swimming Impacts on Pancreatic Inflammatory Cytokines, miR-146a and NF-KB Expression Levels in Type-2 Diabetic Rats. *Current diabetes reviews*, *16*(8), pp.889-894.
- 30. Ghiasi, R., Naderi, R., Sheervalilou, R. and Alipour, M.R., 2019. Swimming training by affecting the pancreatic Sirtuin1 (SIRT1) and oxidative stress, improves insulin sensitivity in diabetic male rats. *Hormone molecular biology and clinical investigation*, 40(3).
- 31. Pezhman, L., Sheikhzadeh Hesari, F., Ghiasi, R. and Alipour, M.R., 2019. Swim training affects bone canonical Wnt pathway in type 2 diabetes induced by high fat diet and low dose of streptozotocin in male rats. *Archives of physiology and biochemistry*, 125(5), pp.465-469.

- 32. Ghiasi, R., Naderi, R., Mozaffar, A. and Alihemmati, A., 2019. The effect of swimming training on oxidative stress, SIRT1 gene expression, and histopathology of hepatic tissue in type 2 diabetic rats. *Biologia Futura*, 70(3), pp.167-174.
- 33. Ghyasi, R., Mohaddes, G. and Naderi, R., 2019. Combination effect of voluntary exercise and garlic (Allium sativum) on oxidative stress, cholesterol level and histopathology of heart tissue in type 1 diabetic rats. *Journal of cardiovascular and thoracic research*, 11(1), p.61.
- 34. Ghyasi, R., Moslehi, A. and Naderi, R., 2019. Combination Effect of Voluntary Exercise and Garlic (Allium sativum) on Oxidative Stress Biomarkers and Lipid Profile in Healthy Rats. *Pharmaceutical Sciences*, 25(3), pp.268-273.
- 35. Fallahi, S., Babri, S., Farajdokht, F., Ghiasi, R., Zangbar, H.S., Karimi, P. and Mohaddes, G., 2019. Neuroprotective effect of ghrelin in methamphetamine-treated male rats. *Neuroscience letters*, 707, p.134304.
- 36. Aghdam, A.M., Shahabi, P., Karimi-Sales, E., **Ghiasi, R.**, Sadigh-Eteghad, S., Mahmoudi, J. and Alipour, M.R., 2018. Swimming Exercise Induced Reversed Expression of miR-96 and Its Target Gene NaV1. 3 in Diabetic Peripheral Neuropathy in Rats. *The Chinese journal of physiology*, 61.
- 37. Pezhman, L., Sheikhzadeh Hesari, F., **Ghiasi,** R. and Alipour, M.R., 2018. The impact of forced swimming on expression of RANKL and OPG in a type 2 diabetes mellitus rat model. *Archives of physiology and biochemistry*, pp.1-6.
- 38. Ghaffari-Nasab, A., Bavil, F.M., **Ghiasi, R.**, Sadigh-Eteghad, S. and Alipour, M.R., 2018. Effects of IMODTM on angiogenesis, miR-503 and CDC25 expression levels in heart tissue of diabetic male rats. *Avicenna journal of phytomedicine*, 8(2), p.152
- 39. Yousefzadeh, N., Jeddi, S., **Ghiasi, R**. and Alipour, M.R., 2017. Effect of fetal hypothyroidism on MyomiR network and its target gene expression profiles in heart of offspring rats. *Molecular and cellular biochemistry*, 436(1-2), pp.179-187.
- 40. **Ghiasi, R.**, Mohammadi, M., Majidinia, M., Yousefi, B., Ghiasi, A. and Badalzadeh, R., 2016. The effects of mebudipine on myocardial arrhythmia induced by ischemia-reperfusion injury in isolated rat heart. *Cellular and molecular biology (Noisy-le-Grand, France)*, 62(13), pp.15-20.
- 41. Vatandoust, S.M., **Ghiasi, R**., Nejad, G.G. and Shahabi, P., 2016. Oxidative Stress and Antioxidant Defense Status in CSF and Blood Content of the WAG/Rij Rat Models Suffering from Absence Epilepsy. *Journal of Experimental and Clinical Neurosciences*, *3*(1), pp.1-6
- 42. **Ghiasi, R.**, Ghadiri, F.S., Mohaddes, G., Alihemmati, A., Somi, M.H., Ebrahimi, H., Mirzaie, F.B. and Alipour, M.R., 2016. Influence of regular swimming

- on serum levels of CRP, IL-6, TNF- α in high-fat diet-induced type 2 diabetic rats. *General physiology and biophysics*, 35(4), pp.469-476.
- 43. Habibi, F., Soufi, F.G., **Ghiasi, R**., Khamaneh, A.M. and Alipour, M.R., 2016. Alteration in inflammation-related miR-146a expression in NF-KB signaling pathway in diabetic rat hippocampus. *Advanced pharmaceutical bulletin*, *6*(1), p.99.
- 44. Naderi, R., Mohaddes, G., Mohammadi, M., Alihemmati, A., Badalzadeh, R., Ghaznavi, R., **Ghyasi, R**. and Mohammadi, S., 2015. Preventive effects of garlic (Allium sativum) on oxidative stress and histopathology of cardiac tissue in streptozotocin-induced diabetic rats. *Acta Physiologica Hungarica*, 102(4), pp.380-390.
- 45. **Ghiasi,** R., Soufi, F.G., hossein Somi, M., Mohaddes, G., Bavil, F.M., Naderi, R. and Alipour, M.R., 2015. Swim training improves HOMA-IR in type 2 diabetes induced by high fat diet and low dose of streptozotocin in male rats. *Advanced pharmaceutical bulletin*, *5*(3), p.379.
- 46. Bavil, F.M., Alipour, M.R., Keyhanmanesh, R., Alihemmati, A., **Ghiyasi, R**. and Mohaddes, G., 2015. Ghrelin decreases angiogenesis, HIF-1α and VEGF protein levels in chronic hypoxia in lung tissue of male rats. *Advanced pharmaceutical bulletin*, *5*(3), p.315.
- 47. Naderi, R., Mohaddes, G., Mohammadi, M., Ghaznavi, R., **Ghyasi, R**. and Vatankhah, A.M., 2015. Voluntary exercise protects heart from oxidative stress in diabetic rats. *Advanced pharmaceutical bulletin*, *5*(2), p.231.
- 48. **Ghiasi, R.**, Mohammadi, M., Helan, J.A., Jozani, S.R.J., Mohammadi, S., Ghiasi, A. and Naderi, R., 2015. Influence of Two Various Durations of Resistance Exercise on Oxidative Stress in the Male Rat's Hearts. *Journal of cardiovascular and thoracic research*, 7(4), p.149.
- 49. Bavil, F.M., Mohaddes, G., Ebrahimi, H., Keyhanmanesh, R., **Ghiyasi, R.** and Alipour, M.R., 2014. Ghrelin increases lymphocytes in chronic normobaric hypoxia. *Advanced pharmaceutical bulletin*, *4*(4), p.339..
- 50. Doustar, Y., Soufi, F.G., Saber, M.M., **Ghiassie, R.** and Jafary, A., 2012. Role of four-week resistance exercise in preserving the heart against ischaemia-reperfusion-induced injury: cardiovascular topic. *Cardiovascular journal of Africa*, 23(8), pp.451-455. Yousef Doustar, Farhad
- 51. **Ghyasi, R.**, Sepehri, G., Mohammadi, M., Badalzadeh, R. and Rashidi, B., 2011. The effect of mebudipine on cardiac function and activity of the myocardial nitric oxide system in ischaemia-reperfusion injury in rats: cardiovascular topics. *Cardiovascular journal of Africa*, 22(6), pp.319-323. 18. Soufi, F.G., Saber,

- M.M., **Ghiassie**, **R**. and Alipour, M., 2011. Role of 12-week resistance training in preserving the heart against ischemia-reperfusion-induced injury. *Cardiology journal*, *18*(2), pp.140-145.
- 52. Yousef, D., Farhad, G.S., **Ghiassie, R**. and Saeid, S., 2011. Effect of resistance exercise on cardiac apoptosis following of ischemic/reperfusion. *Journal of Animal and Veterinary Advances*, *10*(19), pp.2561-2566.
- 53. **Ghiasi R**, Mohammadi M, Badalzadeh R, Sepehri GR, Rashidi B. 2008. Effect of mebudipine on hemodynamical and histological alterations in myocardial ischemiareperfusion injury in rat. Pharmaceutical Sciences; 15(3): 247-256.

Articles Presented in Seminars and Congresses

- 1. Badalzadeh R, Mohammadi M and **Ghiasi** R (2009). Cardioprotectice effect of mebudipine, a new dihydropyridine calcium channel blocker in ischemia-reperfusion injury in rats. 36th Congress of the International Union of Physiological Sciences, KyotoJapan.
- 2. Badalzadeh R, **Ghiasi R**, Mohammadi M (2009). Effect of mebudipine on myocardial nitric oxide system in ischemia-reperfusion injury. First National Congress of Endothelium, Isfahan-Iran.
- 3. **Ghiasi R**, Mohammadi M (2009). Evaluating the effect of mebudipine on stress oxidative and antioxidant defense in myocardial ischemic-reperfusion injury in male rat.
- 4. **Ghiasi R**, Mohammadi M, Badalzadeh R, Sepehri GH, Rashidi B (2009). Influence of mebudipine on histological alterations following ischemia-reperfusion injury in rat. First National Congress of Endothelium, Isfahan-Iran.
- 5. Badalzadeh R, **Ghiasi R**, Mohammadi M, Sepehri GR (2009). Effect of mebudipine on hemodynamical functions of isolated heart during ischemia-reperfusion insult. 10th International Research Congress of Medical Students, Tehran-Iran.
- 6. **Ghiasi R**, Mohammadi, Mustafa (2009). Evaluating the effect of mebudipine on stress oxidative and antioxidant defense in myocardial ischemic-reperfusion injury in male rat. 19th Iranian Congress on Physiology and Pharmacology, Tehran-Iran.
- 7. **Ghiasi R**, Ghadiri Soufi F (2011). Role of four-week resistance exercise in preserving the heart against ischaemia—reperfusion-induced injury. 20th Iranian Congress on Physiology and Pharmacology, Hamedan-Iran.

- 8. R. Ghiasi, H. Babaei, S. Rezaei, G. Gharehbagheri (2012). Short term effects of estrogen therapy on endothelial relaxation in ovariectomized rats. 13th International Congress on Pharmaceutical sciences, Isfahan-Iran.
- 9. **Ghiasi R**, Alipour MR, Ghiasi A (2013). Influence of two various duration of resistance exercise on oxidative stress in the heart of male rats. 21th International Congress on Physiology and Pharmacology, Tabriz- Iran.
- 10. **Rafigheh Ghiasi**, Mohammadreza Alipour, Ali Ghiasi, Navideh Danesgjoo (2015). Ascorbic acid improves HOMA-IR in type 2 diabetes induced by high fat diet and low dose of streptozotocin in male rats.1nd International 22th and International Congress on Physiology and Pharmacology, Hamedan-Iran.
- 11. **Ghiasi R**, Alipour MR, Ghiasi A (2018). Swimming exercise improves inflammatory cytokines through miR-146a and NF-κB signaling pathway in pancreas of type-2 diabetic rats. 2nd International 23nd and Iranian Congress on Physiology and Pharmacology, Hamedan-Iran.

Research projects and thesis supervising

Research projects: 5

PhD thesis supervising: 1

MSc thesis supervising: 8

MD thesis supervising: more than 16.

Research Interests

- 1. Stem cells
- 2. Study of the molecular mechanisms of diabetes Complications.
- 3. Study of complications of obesity.
- 4. Study of the reproduction disorders and theirs mechanisms in diabetes condition and other conditions.
- 5. Study of the electrophysiological properties of cardiac and neural cells.
- 6. Study of the ischemic disorders of the heart in the presence of risk factors in patient and in Langendorff model of isolated heart.