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## Professional Associate Professor of Biochemistry

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#### **Research Scientist**

Metabolic Disorders Research Center, Endocrinology and Metabolism Research Institute, Tehran University of Medical Sciences

## Education Ph.D.

#### **Clinical Biochemistry**

Tehran University of Medical Sciences, Tehran, Iran 2010

M.Sc. Clinical Biochemistry Iran University of Medical Sciences, Tehran, Iran 2000

#### B.Sc.

#### Cellular and Molecular Biology

University of Tehran, Tehran, Iran 1997

- **Research** Non-coding RNAs in cancer and obesity
- Interests Adipokines and Obesity
  - Adipokines and cancer
  - Hormonal carcinogenesis
  - Antioxidanats and oxidative stress

# Publications1. Noori Sh, Nourbakhsh M, Farzaneh Sh, Zarghi A. A Ferrocene<br/>Derivative Reduces Cisplatin Resistance in Breast Cancer Cells<br/>through Suppression of MDR-1 Expression and Modulation of<br/>JAK2/STAT3 Signaling Pathway. Anti-Cancer Agents in<br/>Medicinal Chemistry (IF: 2.55), 2020; 20: 2285-2292

- Farokh Nezhad R, Nourbakhsh M, Razzaghy-Azar M, Sharifi R, Yaghmaei P. The effect of trans-palmitoleic acid on cell viability and sirtuin 1 gene expression in hepatocytes and the activity of peroxisomeproliferator-activated receptor-alpha. Journal of Research in Medical Sciences (IF: 1.5). 2020;25:105.
- Malekpour-Dehkordi Z, Mohiti-Ardekani J, Naghiaee Y, Teimourian Sh, Hemati M, Nourbakhsh M. Metformin and Pioglitazone Reduce Gene Expression of Inflammatory Factors in Insulin Resistant and Hypertrophied Adipocytes. Iranian Journal of Diabetes and Obesity, 2020; 12 (4): 233-240
- Nazarizadeh A, Mohammadi F, Alian F, Faraji P, Nourbakhsh M, Alizadeh-Fanalou Sh. MicroRNA-154: A Novel Candidate for Diagnosis and Therapy of Human Cancers. OncoTargets and Therapy (IF: 3.04). 2020:13 6603–6615
- Akbari N, Ghorbani M, Salimi V, Alimohammadi A, Khamseh M, Akbari H, Nourbakhsh M, Sheikhi A, S Taghavi F, Tavakoli-Yaraki M. Cyclooxygenase Enzyme and PGE2 Expression in Patients with Functional and Non-Functional Pituitary Adenomas. BMC Endocr Disord (IF: 1.8). 2020 Mar 14;20(1):39
- Golpour P, <u>Nourbakhsh M</u>, Mazaherioun M, Janani L, Nourbakhsh M, Yaghmaei P. Improvement of NRF2 Gene Expression and Antioxidant Status in Patients with Type 2 Diabetes Mellitus After Supplementation With omega-3 Polyunsaturated Fatty Acids: A Double-Blind Randomised Placebo-Controlled Clinical Trial. Diabetes Res Clin Pract (IF: 3.23). 2020 Apr;162:108120
- Afshari H, <u>Nourbakhsh M</u>, Salehi N, Mahboubi-Rabbani M, Zarghi A, Noori Sh. STAT3-mediated Apoptotic-enhancing Function of Sclareol Against Breast Cancer Cells and Cell Sensitization to Cyclophosphamide. Iranian Journal of Pharmaceutical Research (IF: 1.18), 19 (1): 398-412 (2020)
- 8. Safarpour, P., Daneshi-Maskooni, M., Vafa, M. <u>Nourbakhsh, M</u>., et al. Vitamin D supplementation improves SIRT1, Irisin, and glucose indices in overweight or obese type 2 diabetic patients:

a double-blind randomized placebo-controlled clinical trial. BMC Fam Pract (IF: 2.43) 21, 26 (2020).

- <u>Nourbakhsh M</u>, Farzaneh Sh, Taghikhani A, Zarghi A, Noori Sh. Anticancer properties of a newly synthesized Ferrocene derivative as selective COX2 inhibitor against MCF-7 breast cancer cells. Anticancer Agents in Medicinal Chemistry (IF: 2.556). Accepted.
- Bolandghamat Pour, Z., <u>Nourbakhsh, M</u>., Mousavizadeh, K. et al. Suppression of nicotinamide phosphoribosyltransferase expression by miR-154 reduces the viability of breast cancer cells and increases their susceptibility to doxorubicin. BMC Cancer (IF: 3.288), 2019, 19: 1027 doi:10.1186/s12885-019-6221-0
- Ilbeigi D, <u>Nourbakhsh M</u>, Pasalar P, Meshkani R, Shokri Afra H, Panahi Gh, Borji M, Sharifi R. Nicotinamide Phosphoribosyltransferase (NAMPT) Knockdown Contributes To The Development Of Fatty Liver Disease Through The SIRT1-AMPK Pathway. Cell Journal (IF: 2.36) 2021, 23; 1 (Apr-Jun), doi: 10.22074/cellj.2021.7013
- Salimi, M, Esrafili A, Jonidi Jafari A, Gholami M, Hamid Reza Sobhi HR, <u>Nourbakhsh M</u>, Akbari-Aderganie B. Photocatalytic degradation of cefixime with MIL-125(Ti)-mixed linker decorated by g-C3N4 under solar driven light irradiation. Colloids and Surfaces A: Physicochemical and Engineering Aspects, (IF: 3.997) 2019. 582: p. 123874.
- Ghorbanhosseini SS, <u>Nourbakhsh M</u>, Zangooei M, Abdolvahabi Z, Bolandghamtpour Z, Hesari Z, Yousefi Z, Panahi Gh, Meshkani R. MicroRNA-494 induces breast cancer cell apoptosis and reduces cell viability by inhibition of nicotinamide phosphoribosyltransferase expression and activity. EXCLI Journal (IF: 2.42), 2019 Sep 12;18: 838-851
- Bolandghamat Pour Z, <u>Nourbakhsh M</u>, Mousavizadeh K, Madjd Z, Ghorbanhosseini SS, Abdolvahabi Z, Hesari Z, Ezzati Mobaser S. Up-regulation of miR-381 inhibits NAD+ salvage pathway and promotes apoptosis in breast cancer cells. EXCLI Journal (IF: 2.42) August 27, 2019;18: 683-696
- 15. Barooni AB, Ghorbani M, Salimi V, Alimohammadi A, Khamseh ME, Akbari H, Imani M, <u>Nourbakhsh M</u>, Sheikhi A, Shirian FI, Ameri M, Tavakoli-Yaraki M. Up-regulation of 15-lipoxygenase enzymes and products in functional and non-functional pituitary adenomas. Lipids Health Dis (IF: 1.93). 2019 Jul 9;18(1):152.
- Malekpour-Dehkordi Z, Teimourian S, <u>Nourbakhsh M</u>, Naghiaee Y, Sharifi R, Mohiti-Ardakani J. Metformin reduces fibrosis factors in insulin resistant and hypertrophied adipocyte via integrin/ERK,

collagen VI, apoptosis, and necrosis reduction. Life Sci (IF: 3.448). 2019 Jul 23:116682.

- Yousefi Z, <u>Nourbakhsh M</u>, Abdolvahabi Z, Ghorbanhosseini SS, Hesari Z, Yarahmadi S, Ezzati-Mobasser S, Seiri P, Borji M, Meshkani R, Malek M. microRNA-141 is associated with hepatic steatosis by downregulating the sirtuin1/AMP-activated protein kinase pathway in hepatocytes. J Cell Physiol (IF: 4.52). 2019 Jun 29..
- Yarahmadi S, Abdolvahabi Z, Hesari Z, Tavakoli-Yaraki M, Yousefi Z, Seiri P, Hosseinkhani S, <u>Nourbakhsh M</u>. Inhibition of sirtuin 1 deacetylase by miR-211-5p provides a mechanism for the induction of cell death in breast cancer cells. Gene (IF: 2.319). 2019 Jun 17.
- Malekpour-Dehkordi Z, Mohiti-Ardakani J, <u>Nourbakhsh M</u>, Teimourian S, Naghiaee Y, Hemati M, Jafary F. Gene expression profile evaluation of integrins in 3T3-L1 cells differentiated to adipocyte, insulin resistant and hypertrophied cells. Gene (IF: 2.319). 2019 Jun 11;710:406-414. doi: 10.1016/j.gene.2019.06.019.
- Shokri Afra H, Zangooei M, Meshkani R, Ghahremani MH, Ilbeigi D, Khedri A, Shahmohamadnejad S, Khaghani S, <u>Nourbakhsh M</u>. Hesperetin is a potent bioactivator that activates SIRT1-AMPK signaling pathway in HepG2 cells. J Physiol Biochem (IF:2.523) . 2019 May 15. doi: 10.1007/s13105-019-00678-4.
- Borji M, <u>Nourbakhsh M</u>, Shafiee SM, Owji AA, Abdolvahabi Z, Hesari Z, Ilbeigi D, Seiri P, Yousefi Z. Down-Regulation of SIRT1 Expression by mir-23b Contributes to Lipid Accumulation in HepG2 Cells. Biochem Genet (IF: 1.927). 2019 Jan 29. doi: 10.1007/s10528-019-09905-5.
- Abdolvahabi Z, <u>Nourbakhsh M</u>, Hosseinkhani S, Hesari Z, Alipour M, Jafarzadeh M, Ghorbanhosseini SS, Seiri P, Yousefi Z, Yarahmadi S, Golpour P. MicroRNA-590-3P suppresses cell survival and triggers breast cancer cell apoptosis via targeting sirtuin-1 and deacetylation of p53. J Cell Biochem (IF: 3.448). 2018 Dec 5. doi: 10.1002/jcb.28211.
- Ahmadpour F, <u>Nourbakhsh M</u>, Razzaghy-Azar M, Khaghani Sh, Alipoor B, Abdolvahabi Z, Zangoei M. The Association of Plasma Levels of Mir-34A and Mir-149 with Obesity and Insulin Resistance in Obese Children and Adolescents. Acta Endo (Buc) (IF: 0.8) 2018, 14 (2): 149-154
- 24. Zangooei M, <u>Nourbakhsh M</u>, Ghahremani MH, Meshkani R, Khedri A, Shadboorestan A, Shokri Afra H, Shahmohamadnejad Sh, Mirmiranpour H, Khaghani Sh. Investigating the effect of visfatin on ERalpha phosphorylation (Ser118 and Ser167) and

ERE-dependent transcriptional activity. EXCLI J (IF: 2.42). 2018; 17: 516–525.

- 25. Mohseni R, Arab Sadeghabadi Z, Goodarzi MT, Teimouri M, <u>Nourbakhsh M</u>, Razzaghy Azar M. Evaluation of Mn-superoxide dismutase and catalase gene expression in childhood obesity: its association with insulin resistance. J Pediatr Endocrinol Metab (IF: 1.239). 2018 Jul 26;31(7):727-732.
- Karimzadeh P, Saberi M, Sheidaee K, <u>Nourbakhsh M</u>, Keramatipour M. 3-Hydroxyisobutyryl-CoA hydrolase deficiency in an Iranian child with novel HIBCH compound heterozygous mutations. Clinical Case Reports, 2019;1–6.
- Hesari Z, <u>Nourbakhsh M</u>, Hosseinkhani S, Abdolvahabi Z, Alipour M, Tavakoli-Yaraki M, Ghorbanhosseini SS, Yousefi Z, Jafarzadeh M, Yarahmadi S. Down-regulation of NAMPT expression by mir-206 reduces cell survival of breast cancer cells. Gene (IF: 2.319). 2018 Oct 5;673:149-158
- Razzaghy-Azar M, <u>Nourbakhsh M</u>, Nourbakhsh M. A novel treatment for height growth in patients with growth hormone insensitivity syndrome by cyproheptadine hydrochloride. Clin Endocrinol (Oxf) (3.487). 2018 Jun;88(6):880-888
- 29. Arab Sadeghabadi Z, <u>Nourbakhsh M</u>, Pasalar P, Emamgholipour S, Golestani A, Larijani B, Razzaghy-Azar M. Reduced gene expression of sirtuins and active AMPK levels in children and adolescents with obesity and insulin resistance. Obes Res Clin Pract (IF: 2.37). 2018 Mar - Apr;12(2):167-173.
- Safarpour P, Vafa MR, Amiri F, Janani L, <u>Nourbakhsh M</u>, Rajabpour Nikoo E, Sadeghi H. A double blind randomized clinical trial to investigate the effect of vitamin D supplementation on metabolic and hepato-renal markers in type 2 diabetes and obesity. Med J Islam Repub Iran. 2018 Apr 28;32:34
- Behrouzfar K, Alaee M, <u>Nourbakhsh M</u>, Gholinejad Z, Golestani A. Extracellular NAMPT/visfatin causes p53 deacetylation via NAD production and SIRT1 activation in breast cancer cells. Cell Biochem Funct (1.854). 2017 Aug;35(6):327-333.
- Sadeghabadi ZA, <u>Nourbakhsh M</u>, Alaee M, Larijani B, Razzaghy-Azar M. Peroxisome proliferator-activated receptor gamma expression in peripheral blood mononuclear cells and angiopoietin-like protein 4 levels in obese children and adolescents. J Endocrinol Invest (IF:3.166). 2018 Feb;41(2):241-247

- Saeedi S, Bandarian F, Meshkani R, <u>Nourbakhsh M</u>, Nasli-Esfahani E, Larijani B. Iran Diabetes Research Roadmap (IDRR) Study; Trends of Basic Sciences Publication: A Review Article. Iranian Journal of Public Health (IF: 0.76). 2017 46(Supple 1):60-7
- <u>Nourbakhsh M</u>, Sharifi R, Ghorbanhosseini SS, Javad A, Ahmadpour F, Razzaghy Azar M, Larijani B. Evaluation of Plasma TRB3 and Sestrin 2 Levels in Obese and Normal-Weight Children. Child Obes (. 2017 Oct;13(5):409-414.
- Afrasiabian H, <u>Nourbakhsh M</u>, Sadeghizadeh M. Evaluation of the Effect of Platelet Mediators to Increase the Skin's Collagen; A Randomized Clinical Trial. Global Journal of Health Science; 2017 Vol. 9, No. 9: 52-57
- 36. Ilbeigi D, <u>Nourbakhsh M</u>, Khaghani S, Einollahi N, Kheiripour N, Gholinejad Z, Alaee M, Saberian M. Enterolactone Reduces Telomerase Activity and The Level of Its Catalytic Subunit in Breast Cancer Cells. Cell J. 2017 Spring;19(Suppl 1):37-43.
- Gholinejad Z, Kheiripour N, <u>Nourbakhsh M</u>, Ilbeigi D, Behroozfar K, Hesari Z, Golestani A, Shabani M, Einollahi N. Extracellular NAMPT/Visfatin induces proliferation through ERK1/2 and AKT and inhibits apoptosis in breast cancer cells. Peptides. 2017 Jun;92:9-15.
- Alaee M, Khaghani S, Behroozfar K, Hesari Z, Ghorbanhosseini SS, <u>Nourbakhsh M</u>. Inhibition of Nicotinamide Phosphoribosyltransferase Induces Apoptosis in Estrogen Receptor-Positive MCF-7 Breast Cancer Cells. J Breast Cancer. 2017 Mar;20(1):20-26.
- Rahideh ST, Keramatipour M, <u>Nourbakhsh M</u>, Koohdani F, Hoseini M, Shidfar F. The effects of Nobiletin, Hesperetin, and Letrozole in a combination on the activity and expression of aromatase in breast cancer cells. Cell Mol Biol (Noisy-le-grand). 2017 Feb 28;63(2):9-13.
- Rahideh ST, Keramatipour M, <u>Nourbakhsh M</u>, Koohdani F, Hoseini M, Talebi S, Shidfar F. Comparison of the effects of nobiletin and letrozole on the activity and expression of aromatase in the MCF-7 breast cancer cell line. Biochem Cell Biol. 2017 Aug;95(4):468-473.
- Saeedi S, Bandarian F, Meshkani R, <u>Nourbakhsh M</u>, Nasli-Esfahani E, Larijani B. Iran Diabetes Research Roadmap (IDRR) study; trends of basic sciences publication: a review article. Iran J Public Health, Vol. 46, Supple. No. 1, Mar 2017, pp.60-67
- 42. Khosravi, N., Choobdar, F.A., Khalesi, N., Bordbar, A., Larijani, B., Arab, Z., <u>Nourbakhsh, M</u>. Acylated ghrelin, growth hormone and

IGF-1 levels in the cord blood of small for gestational age newborns. Journal of Comprehensive Pediatrics, 2016:7 (4), art. no. e42809

- 43. Rezvan N, Moini A, Janani L, Mohammad K, Saedisomeolia A, <u>Nourbakhsh M</u>, Gorgani-Firuzjaee S, Mazaherioun M, Hosseinzadeh-Attar MJ. Effects of Quercetin on Adiponectin-Mediated Insulin Sensitivity in Polycystic Ovary Syndrome: A Randomized Placebo-Controlled Double-Blind Clinical Trial. Horm Metab Res. 2016 Nov 7. [Epub ahead of print]
- Sarhadi Kholari F, Dehpour AR, <u>Nourbakhsh M</u>, Doustimotlagh AH, Bagherieh M, Golestani A, Erythrocytes Membrane Alterations Reflecting Liver Damage in CCI –Induced Cirrhotic Rats: The Ameliorative Effect of Naltrexone. Acta Medica Iranica, 2016, 54 (10) 2016, 632-640
- 45. Beik J, Abed Z, Shakeri-Zadeh A, <u>Nourbakhsh M</u>, Shiran MB, Evaluation of the sonosensitizing properties of nano-graphene oxide in comparison with iron oxide and gold nanoparticles. Physica E: Low-dimensional Systems and Nanostructures. 2016 July, Volume 81, 308–314
- 46. Beik J, Abed Z, Ghadimi-Daresajini A, <u>Nourbakhsh M</u>, Shakeri-Zadeh A, Ghasemi MS, Shiran MB, Measurements of nanoparticle-enhanced heating from 1 MHz ultrasound in solution and in mice bearing CT26 colon tumors. Journal of Thermal Biology. 2016 December, Volume 62, Part A, 84–89
- 47. Razzaghy-Azar M, <u>Nourbakhsh M</u>, Pourmoteabed A, Nourbakhsh M, Ilbeigi D, Khosravi M. An Evaluation of Acylated Ghrelin and Obestatin Levels in Childhood Obesity and Their Association with Insulin Resistance, Metabolic Syndrome, and Oxidative Stress. J Clin Med. 2016 Jun 23;5(7).
- Rahideh ST, Shidfar F, <u>Nourbakhsh M</u>, Hoseini M, Koohdani F, Entezam M, Keramatipour M. The individual or combinational effects of Hesperetin and Letrozole on the activity and expression of aromatase in MCF-7 cells. Cell Mol Biol (Noisy-legrand). 2016 May 30;62(6):38-43.
- Salimi V, Shabani M, <u>Nourbakhsh M</u>, Tavakoli-Yaraki M. Involvement of 15-lipoxygenase-1 in the regulation of breast cancer cell death induced by sodium butyrate. Cytotechnology. 2016 May 12.
- 50. <u>Nourbakhsh M</u>, Ahmadpour F, Chahardoli B, Malekpour-Dehkordi Z, Nourbakhsh M, Hosseini-Fard SR, Doustimotlagh A, Golestani A, Razzaghy-Azar M. Selenium and its relationship with selenoprotein P and glutathione peroxidase in children and

adolescents with Hashimoto's thyroiditis and hypothyroidism. J Trace Elem Med Biol. 2016 Mar;34:10-4.

- <u>Nourbakhsh M</u>, Nourbakhsh M, Gholinejad Z, Razzaghy-Azar M. Visfatin in obese children and adolescents and its association with insulin resistance and metabolic syndrome. Scand J Clin Lab Invest. 2015 Apr;75(2):183-8.
- Razzaghy-Azar M, Latifi M, Ilbeygi D, Larijani B, <u>Nourbakhsh M</u>. Total and Acylated Ghrelin Levels in Children and Adolescents with Idiopathic Short Stature and Poor Appetite. Acta Endo (Buc) 2015, 11 (3): 401-406
- 53. Maleki J, <u>Nourbakhsh M</u>, Shabani M, Korani M, Nourazarian SM, Ostadali Dahaghi MR, Moghadasi MH. 17β-Estradiol Stimulates Generation of Reactive Species Oxygen and Nitric Oxide in Ovarian Adenocarcinoma Cells (OVCAR 3). Iranian Journal of Cancer Prevention, May 2015: 7-9
- 54. Seifirad S, Farzampour S, <u>Nourbakhsh M</u>, Amoli MM, Razzaghy-Azar M, Larijani B. Effects of extremely low frequency electromagnetic fields on paraoxonase serum activity and lipid peroxidation metabolites in rat. J Diabetes Metab Disord. 2014 Aug 13;13(1):85.
- 55. Doustimotlagh AH, Dehpour AR, <u>Nourbakhsh M</u>, Golestani A. Alteration in membrane protein, antioxidant status and hexokinase activity in erythrocytes of CCl4- induced cirrhotic rats. Acta Med Iran. 2014;52(11):795-803.
- 56. <u>Nourbakhsh M</u>, Golestani A, Zahrai M, Modarressi MH, Malekpour Z, Karami-Tehrani F. Androgens stimulate telomerase expression, activity and phosphorylation in ovarian adenocarcinoma cells. Molecular and cellular endocrinology, 2010; 330:10-16
- 57. Razzaghy Azar M, Nourbakhsh M, <u>Nourbakhsh M</u>. Congenital Adrenal Hyperplasia: Experience in Iranian Patients. Journal of Comprehensive Pediatrics, 2012;3(2):54-61
- 58. Sharifi R, Pasalar P, Kamalinejad M, Dehpour AR, Tavangar SM, Paknejad M, Mehrabani Natanzi M, <u>Nourbakhsh M</u>, Ahmadi Ashtiani HR, Akbari M, Rastegar H. The effect of silymarin (Silybum marianum) on human skin fibroblasts in an in vitro wound healing model. Pharmaceutical Biology. 2013 Mar; 51(3):298-303.
- 59. Korani M, Fallah S, Tehranian A, <u>Nourbakhsh M</u>, Samadikuchaksaraei A, Sanjary Pour M, Maleki J. The Evaluation of the FOXO1, KLF9 and YT521 Genes Expression in Human Endometrial Cancer. Clin. Lab. 2013;59
- 60. Nourazarian SM, Irajian G, Najafi M, <u>Nourbakhsh M</u>, Maleki J, Shabani M. The effect of Lactobacillus reuteri on bone

morphogenetic protein-7 and beta transforming growth factor gene expressions in streptozotocin-induced diabetic rat's kidneys. Pakistan Journal of Biological Sciences. 2012: 1-6

- Malekpour-Dehkordi, Z., Javadi, E., Doosti, M., Paknejad, M., <u>Nourbakhsh, M</u>., Yassa, N., Gerayesh-Nejad, S. and Heshmat, R. (2012), S-Allylcysteine, a Garlic Compound, Increases ABCA1 Expression in Human THP-1 Macrophages. Phytother. Res. doi: 10.1002/ptr.4713
- 62. Firoozrai M, <u>Nourbakhsh M</u>, Razzaghy-Azar M. Erythrocyte susceptibility to oxidative stree and antioxidant status in patients with type 1 diabetes. Diabetes research and clinical practice, 2007;77:427-432
- 63. Razzaghy-Azar M, <u>Nourbakhsh M</u>, and Hajighasemi F. Clinial and hormonal milieu of 9 pateints with primary growth hormone insensitivity syndrome and their response to IGF-I generation test. Acta Medica Iranica, 2006;44:53-58
- 64. Razzaghy Azar M, <u>Nourbakhsh M</u>. A review of patients with ambiguous genitalia due to congenital adrenal hyperplasia. Genetics in th 3<sup>rd</sup> millennium, 2003;1:100-106

# Conference presentations

 Nourbakhsh M, Ezzati Mobasser S, Malekpour Dehkordi , Nourbakhsh M, Razzaghy Azar M. Involvement of visfatin in adipose tissue fibrosis through modulation of extracellular matrix proteins. Horm Res Paediatr 2019;91 (suppl 1):1–682. 58th Annual Meeting of the European Society for Paediatric Endocrinology (ESPE) Vienna, Austria, September 19–21, 2019

- M. Nourbakhsh\*, S. Yarahmadi\*, Z. Abdolvahabi, Z. Hesari, M. Tavakoli-Yaraki, Z. Yousefi, P. Seiri. Inhibition of SIRT1/p53 pathway by miR-211 and induction of cell death in breast cancer cells. FEBS Open Bio 2019; 9(Suppl 1):180-181, 44<sup>th</sup> FEBS Congress, July 6-11, Krakow, Poland
- Nourbakhsh M, Yarahmadi S, Dadkhah-Nikroo N, Razzaghy-Azar M. Increased adipose triglyceride lipase (ATGL) gene expression is associated with obesity and lipid accumulation in liver. 15th Middle East Metabolic Group Meeting (MEMG), Nov 29-Dec 2, Beirut, Lebanon, 2018
- Nourbakhsh M, Yousefi Z, Dadkhah-Nikroo N, Malek M, Pazouki A, Mokhber S. MicroRNA-141 Directly Targets and Inhibits Sirtuin 1 Gene Expression and its Elevation in Obese Subjects Is Responsible for Reduced Levels of Sirtuin1 and the Subsequent Hepatic Steatosis and Insulin Resistance. Horm Res Paediatr 2018;90(suppl 1):1–680, 57th Annual Meeting of the ESPE, Athens, Greece.

- Yousefi Z, Nourbakhsh M, MiR-141 regulates expression and activity of SIRTuin1 and AMP-activated protein kinase in hepatocytes. The 15<sup>th</sup> Iranian national congress of biochemistry and 6<sup>th</sup> international congress of biochemistry and molecular biology, August 25-28, 2018, Tehran, Iran
- 6. Yarahmadi S, Nourbakhsh M, Dadkhah Nikroo N, Malek M, Evaluation of adipose triglyceride lipase gene expression in peripheral blood mononuclear cells of patients with obesity compared with normal subjects. The 15th Iranian national congress of biochemistry and 6th international congress of biochemistry and molecular biology, August 25-28, 2018, Tehran, Iran
- Nourbakhsh M, Abdolvahabi Z, Hosseinkhani S, Hesari Z, Tavakoli-Yaraki M, miR-590-3p inhibits sirtuin1 expression and reduces cell survival of breast cancer cells. The 15th Iranian national congress of biochemistry and 6th international congress of biochemistry and molecular biology, August 25-28, 2018, Tehran, Iran
- Ezzati-Mobasser S, Nourbakhsh M, Malekpour-Dehkordi Z, Visfatin induces gene expression of extracellular matrix components in pre-adipocytes and differentiated adipocytes. The 15th Iranian national congress of biochemistry and 6th international congress of biochemistry and molecular biology, August 25-28, 2018, Tehran, Iran
- 9. Nourbakhsh M, Hesari Z, Hosseinkhani S, Abdolvahabi Z, Ghorbanhosseini SS, Tavakoli-Yaraki M, Alipour M, Jafarzadeh M. MicroRNA-206 reduces cell survival of breast cancer cells by targeting nicotinamide phosphoribosyltransferase and reducing cellular NAD levels. FEBS Open Bio, Volume 8, Issue S1, 43<sup>rd</sup> FEBS Congress, July 7-12 2018, Prague, Czech Republic
- Nourbakhsh M, Arab Sadeghabadi Z, Razzaghy Azar M, Angiopoietin-like protein 2 is associated with dyslipidemia and hypertension in children and adolescents, 14<sup>th</sup> Middle East Metabolic Group Meeting (MEMG), Feb 9-11, Athens, Greece, 2018
- 11. Nourbakhsh M, Arab Sadeghabadi Z, Pasalar P, Golestani A, Razzaghy Azar M. Reduced AMP-activated protein kinase in obese children and adolescents and its association with insulin resistance. 43rd Annual Meeting of the International Society for Pediatric and Adolescent Diabetes (ISPAD), Pediatric Diabetes, Innsbruck, Austria, 2017 (18): Supplement 25
- Nourbakhsh M., Behrouzfar K., Alaiee M., Golestani A. Extracellular visfatin increases sirtuin 1 activity and cause p53 deacetylation by producing NAD. EACR-AACR-SIC SPECIAL Conference 2017, Florence, Italy (2017)

- Nourbakhsh M, Hosnieh Farahan A, Yaghmaei F, Moradgholi S, Ahmadpour F, Razzaghy-Azar M. miR-26b is decreased in obesity and is associated with insulin resistance and visfatin levels, 19th European Congress of Endocrinology 2017, Lisbon, Portugal, Endocrine Abstracts (2017) Vol 49
- 14. Nourbakhsh M, Ahmadpour F, Khaghani Sh, Alipour B, Razzaghy Azar M, Association of miR-34a and mir-149 with Obesity and Insulin Resistance in Obese Children and Adolescents. 55th ESPE Annual Meeting, Paris, France, Hormone Research in Pediatrics, Vol. 86, Suppl. 1, 2016
- Nourbakhsh M, Arab Z, Razzaghy Azar M, PPARγ gene expression and its association with metabolic parameters in obese children and adolescents. 13<sup>th</sup> MEMG Conference, Amman, Jordan, October 2016
- 16. Nourbakhsh M, Razzaghy-Azar M, Arab Z, Pasalar P, Golestani A, Larijani B, SIRT1 and SIRT2 Gene Expression in Peripheral Blood Mononuclear Cells of Obese Children and Adolescents and their Relationship with Metabolic Parameters and Insulin Resistance. 54th ESPE Annual Meeting, Barcelona, Spain, October 2015, Hormone Research in Pediatrics. Vol. 84, Suppl. 1, 2015, 208
- Razzaghy-Azara M, Nourbakhshb M, Pourmoteabed A, Nourbakhsha M, Ilbeigi D, Evaluation of Acylated Ghrelin and Obestatin Levels and Ghrelin:Obestatin Ratio in Obesity, 54th ESPE Annual Meeting, Barcelona, Spain, October 2015Horm Res Paediatr 2015;84(suppl 1): 222
- Nourbakhsh M, Arab Z, Razzaghy Azar M. Angiopoietin-like protein 4 (ANGPTL4) is reduced in obese children and adolescents and is correlated with HDL. 12<sup>th</sup> MEMG Annual Conference, Muscat, Oman, October 2015
- Nourbakhsh M., Kheiripour N, Gholinejad Z, Golestani A, Shabani M, Einollahi N, Khaghani S. Visfatin exerts FEBS Journal Special Issue: FEBS EMBO 2014 Conference, Paris, France, 30 August-4 September 2014 Volume 281, Issue Supplement s1, pages 65– 784, September 2014
- 20. Sarhaddi Khollari F, Dehpour AR, Nourbakhsh M, Bagherieh M, Golestani A. Ameliorative effects of Naltrexone on CCl4induced liver cirrhosis in an animal model study. FEBS Journal, Special Issue: FEBS EMBO 2014 Conference, Paris, France, 30 August-4 September 2014 Volume 281, Issue Supplement s1, pages 65–784, September 2014
- 21. <u>Nourbakhsh M</u>, Latifi M, Ilbeygi D, Razzaghy Azar M. Total and acylated ghrelin levels in children and adolescents with growth

retardation. 53<sup>rd</sup> Annual Meeting of the European Society for paediatric Endocrinology (ESPE), Dublin, Ireland, Horm Res Paediatr 2014;82(suppl 1), page 474

- <u>Nourbakhsh M</u>, Malekpour-Dehkordi Z, Chahardoli B, Doustimotlagh AH, Golestani A, Razzaghy-Azar M, Glutathione peroxidase and Selenoprotein P levels in children and adolescents with Hashimoto's thyroiditis and subclinical hypothyroidism. Milan, Italy, 19-22 September 2013, Horm Res Paediatr 2013;80(suppl 1), page 355
- 23. Razzaghy-Azar M, Nourbakhsh M, Nourbakhsh M. Growth and cystinosis. 10<sup>th</sup> MEMG annual conference, 2013, Istanbul, Turkey, October 2013
- <u>Nourbakhsh M</u>, Razzaghy-Azar M, The effect of insulin analogues on telomerase catalytic subunit expression in breast cancer cells, Barcelona, Spain, 24-27 March, 2010, EJC Supplements, Vol. 8, No. 3 March 2010
- 25. Razzaghy Azar M, Nourbakhsh M, Nourbakhsh M. Growth and cyctinosis. Middle <u>East Metabolic Group (MEMG) meeting</u>, Istanbul, Turkey, 5-7 December, 2013
- 26. <u>M. Nourbakhsh</u>, M Zahrai, A Golestani, MH. Modarressi, F. Karami-Tehrani. Increased telomerase expression and activity by androstenedione and its suppression by phosphatidylinositol 3-kinase inhibitor in ovarian cancer. 10<sup>th</sup> iranian congress of biochemistry and 3<sup>rd</sup> international congress of biochemistry and molecular biology, Tehran, Iran, November 16-19, 2009
- M. Nourbakhsh, M. Zahraei, A. Golestani, MH. Modarressi, F. Karami-Tehrani. testosterone-induced cellular proliferation and telomerase up-regulation in ovarian cancer, 34<sup>th</sup> FEBS (federation of European biochemical societies) congress, Prague, Czech Republic, 4-9 July 2009, FEBS J, Volume 276, Issue Supplement s1
- M. Nourbakhsh, M. Zahraei, A. Golestani, MH. Modarressi, F. Karami-Tehrani, The effect of androstenedione on proliferation of ovarian epithelial cancer cells. 8<sup>th</sup> international conference of anticancer research, Kos, Greece, 17-22 October, 2008
- M. Firouzray, <u>M. Nourbakhsh</u>, M.R. Azar, Atioxidant status in patients with type 1 diabetes mellitus, Horm. Res. 64 (S1) (2005) 157 (ESPE/LWPES 7th Joint Meeting Paediatric Endocrinology, Lyon, France, 21–24 September, 2005, Horm Res Paediatr Vol. 64, Suppl. 1, 2005
- 30. M. Firoozray, M. Razzaghy-Azar, <u>M. Nourbakhsh</u>, The effect of oxidative stress on erythrocyte lipids in type 1 diabetes mellitus,

Horm. Res. 62 (S2) (2004) 134, P3-480 (43th Annual Meeting of European Society for Pediatric Endocrinology (ESPE), Basel, Switzerland, 10–13 September 2004). Horm Res Paediatr Vol. 62, Suppl. 2, 2004

PatentsCyproheptadine as a novel drug for treatment of patients with growth<br/>hormone insensitivity syndrome (Larone syndrome). Iran patents No.<br/>97150, Date 2018-11-10

#### Teaching 2006-present

**experience** Teaching biochemistry and related subjects to undergraduate and graduate students of Biochemistry (MSc and PhD)

Invited teaching of Biochemistry in Tehran University of Medical Sciences

Teaching Biochemistry to medical students

Teaching Biochemistry in English to international students (medicine and pharmacy)

Teaching Biochemistry for the MSc and PhD students of physiology, immunology and microbiology

Teaching biochemistry for the students of nursing, health, and optometry

Re-developed biochemistry curriculum for medical students in Iran University of Medical Sciences and Tehran University of Medical Sciences

Involved in the development of national curriculum for medical students

Re-designed some of the courses for graduate students

Implementation of an integrative teaching for metabolic disorders course for PhD students of biochemistry (Awarded in Motaharri Festival of education)

Conducted education lectures for the specialists of endocrinology and metabolism

Design and implementation of many educational workshops

Design and implementation of virtual course for PhD students of Biochemistry

# ExecutiveDeputy for medical education in the department of biochemistry, IranActivitiesUniversity of Medical Sciences (2013- 2020)

Member of the Board of Biochemistry, Ministry of Health and Medical Education (2018- present)

Member of the medical education planning Committee of the Medical School of Iran University of Medical Sciences

Chairman of the Basic Science Committee of General Medicine Group

Head of the Student Research Committee of the School of Medicine, Iran University of Medical Sciences

Member of the Accreditation Committee of Medical Education in Iran University of Medical Sciences

Member of the Education Planning Committee of the School of Medicine, Iran University of Medical Sciences

Member of the Biosafety Committee of the Medical School of Iran University of Medical Sciences

Member of the research council of Metabolic Disorders Research Center, Endocrinology and Metabolism Research Institute, Tehran University of Medical Sciences

Member of the research council of the School of Medicine, Iran University of Medical Sciences

Member of the research council of the Student Research Committees of Iran University of Medical Sciences

Member of the committee for the Accreditation of the General Medical Education, Iran University of Medical Sciences

Member of the Iran Biochemical Society

Member of the Iran Trace Elements Society

Member of the European Society of Endocrinology

Member of the editorial board of the Journal of Diabetes and Metabolic Disorders

Member of the editorial board of the Avicenna Journal of Medical Biochemistry

Member of the editorial board of the Archives of Medical Laboratory Sciences journal Deputy for research affairs in Metabolic disorders research center, Endocrinology and Metabolism Research Institute, Tehran University of Medical Sciences (2011-2014)

Scientific secretary of the Iran Trace Element Society (2010-2016)

Founder member of the Metabolic Disorders Research Center, Tehran University of Medical Sciences

Founder member of the Finetech in Medicine Research Center, Iran University of Medical Sciences

#### Awards Best professor award in the 5<sup>th</sup> Dr. Vosough Educational Festival in Iran University of Medical Sciences in 2020

Best educational process of Iran University of Medical Sciences in Motahari Educational Festival in 2019

Best educational process of Iran University of Medical Sciences in Motahari Educational Festival in 2015

Best poster presentation in the 13<sup>th</sup> Middle East Metabolic Group meeting, 2017

Best oral presentation in the 10<sup>th</sup> National Congress of Biochemistry and 3<sup>rd</sup> International Congress of Biochemistry and Molecular Biology, 2009

Awarded as the exceptional talent student in Tehran University of Medical Sciences, 2007

Best post-graduate student in Tehran University of Medical Sciences, 2006

Awarded for ranking number 1 among the PhD candidates of Clinical Biochemistry from Ministry of Health and Medical Education, 2005