#### **Curriculum Vitae**

Name: Sayed Mohammad Shafiee

Date and Place of Birth: August, 27, 1977; Shiraz, Iran

Marital Status: Married, two children

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#### Education:

2008- 2013 **Ph.D.,** Clinical Biochemistry, Shiraz University of Medical Sciences, Shiraz, Iran. *Thesis title*: Investigation on UBE2Q1 and UBE2Q2 human genes expression in colorectal cancer and colorectal cell lines along with preparation of stable transfectants of UBE2Q1 gene.

1999-2002 **M.S.,** Medical Biochemistry, Iran University of Medical Sciences, Tehran, Iran. *Thesis title*: Extraction and development of purification and assay of angiotensin converting enzyme (ACE) from rabbit lung.

1995-1999 **B.S.,** Biology, Shiraz University, Shiraz, Iran.

#### Careers:

2013 August- present Assistant Professor, Dept. of Biochemistry, School of Medicine, **Shiraz University of Medical Sciences**, Shiraz, Iran.

2011-2012 Teaching instructor, School of Dentistry, **Islamic Azad University**, Shiraz, Iran.

2003- 2007 Academic staff as an instructor, Dept. of biochemistry/cell and molecular biology research center, School of Medicine, Iran University of Medical Sciences, Tehran, Iran.

2004-2005 R&D section of ChemEnzyme Diagnostics Company, ELISA division. Under the supervision of **Red Crescent Society of Iran**, Tehran, Iran.

# Teaching Experience:

Dept. of Biochemistry, School of Medicine, Shiraz University of Medical Sciences:

- Teaching some courses in hormone biochemistry, clinical biochemistry and biochemical techniques/ instruments for M.Sc. students of biochemistry and PhD students of Nutritional Sciences.
- Teaching some courses in structural biochemistry and metabolism for Medical, Dentistry and Pharmacy students.
- Teaching general biochemistry for Nutritional Sciences, Nursing, Midwifery, Public Health and Anesthesiology students.

### Dept. of Biochemistry, School of Medicine, Iran University of Medical Sciences:

- Teaching biochemical techniques including protein purification, PCR and DNA extraction methods for M.Sc. students.
- Teaching general biochemistry for Public Health, Optometry and Audiology students.
- Teaching medical biochemistry laboratory for Medical students.

## School of Dentistry, Islamic Azad University of Shiraz:

Teaching biochemistry (both theory and laboratory) for Dentistry students.

#### Dept. of biology and genetics, Islamic Azad University of Arsanjan:

- Teaching biochemistry (both theory and laboratory) for students of genetics.

# Workshop Presentations:

- Fundamentals and Applications of SDS-PAGE and Western Blotting, a Practical Approach. **Forth** Postgraduate Summer School, Shiraz University of Medical Sciences. September 2015.
- Fundamentals and Applications of SDS-PAGE and Western Blotting, a Practical Approach. Third Postgraduate Summer School, Shiraz University of Medical Sciences. September 2014.
- Fundamentals and Applications of SDS-PAGE and Western Blotting, a Practical Approach. Second Postgraduate Summer School, Shiraz University of Medical Sciences. September 2013.
- Safety in biomedical laboratories. Held by Lab Safety committee of the school of medicine, 2013 up to now.
- Fundamentals and Applications of SDS-PAGE and Western Blotting, a Practical Approach. **First** Postgraduate Summer School, Shiraz University of Medical Sciences. September 2012.
- Cell Culture and Gene transfer to Mammalian Cells; Cell Transfection. Shiraz University of Medical Sciences. 2011.

#### Honors and Awards:

- Selected as first rank talented student by the office of talented students of Shiraz University of Medical Science, 2012.
- Honored Ph.D. student at Shiraz University of Medical Science, 2011.
- Honored Ph.D. student at Shiraz University of Medical Science, 2009.
- Certificate of the distinguished M.Sc. student at Cellular and Molecular Research Center according to the designation of connectors and a gradient mixer for FPLC apparatus. Iran University of Medical Sciences, 2001.

## Publications:

- 1- Autophagy and Ubiquitination as Two Major Players in Colorectal Cancer: Recent Patents Review. Saffari-Chaleshtori J, Asadi-Samani M, Rasouli M, **Shafiee SM**. Recent Pat Anticancer Drug Discov. 2020 Jun 29. doi: 10.2174/1574892815666200630103626.
- 2- The role of radiation induced oxidative stress as a regulator of radio-adaptive responses. Sisakht M, Darabian M, Mahmoodzadeh A, Bazi A, **Shafiee SM**, Mokarram P, Khoshdel Z. Int J Radiat Biol. 2020 May;96(5):561-576. doi: 10.1080/09553002.2020.1721597. Epub 2020 Feb 7.
- 3- The study of drug resistance properties of ABCG2 (ATP-binding cassette G2) in contact with thymoquinone, gallic acid, and hesperetin antioxidants. Saffari-Chaleshtori, J., **Shafiee, S.M.**, Ghatreh-Samani, K., Jalilian, N. Journal of HerbMed Pharmacology. 2019, 8(2), pp. 108-113
- 4- Berberine attenuated oxidative stress induced by sodium nitrite in rat liver. Akhzari, M., **Shafiee, S.M.**, Rashno, S., Akmali, M. Jundishapur Journal of Natural Pharmaceutical Products. 2019, 14(1),e68532
- 5- Down-Regulation of SIRT1 Expression by mir-23b Contributes to Lipid Accumulation in HepG2 Cells. Borji M, Nourbakhsh M, **Shafiee SM**, Owji AA, Abdolvahabi Z, Hesari Z, Ilbeigi D, Seiri P, Yousefi Z. Biochem Genet. 2019 Aug;57(4):507-521. doi: 10.1007/s10528-019-09905-5. Epub 2019 Jan 29.
- 6- Vitronectin and Urokinase-Type Plasminogen Activator Gene Expression Levels Are Increased in Patients with Coronary Artery In-Stent Restenosis. **Shafiee SM**, Noorabad-Ghahroodi F, Amirfarhangi A, Hosseini-Fard SR, Sharifi Z, Najafi M. Int J Angiol. 2017 Dec;26(4):218-222. doi: 10.1055/s-0037-1601871. Epub 2017 Apr 16.
- 7- Differential Effects of Resveratrol on the Expression of Brain-Derived Neurotrophic Factor Transcripts and Protein in the Hippocampus of Rat Brain. Shojaei S, Panjehshahin MR, **Shafiee SM**, Khoshdel Z, Borji M, Ghasempour G, Owji AA. Iran J Med Sci. 2017 Jan;42(1):32-39.

- 8- The efficacy of intravitreal interferon alpha-2b for the treatment of experimental endotoxin-induced uveitis. Afarid, M., Lashkarizadeh, H., Ashraf, M.J., Nowroozzadeh, M.H., **Shafiee, S.M**. Indian J Ophthalmol. 2016 May;64(5):376-81. doi: 10.4103/0301-4738.185605.
- 9- Induction of cell proliferation, clonogenicity and cell accumulation in S phase as a consequence of human UBE2Q1 overexpression. Fahmidehkar MA, **Shafiee SM**, Eftekhar E, Mahbudi L, Seghatoleslam A.. Oncol Lett. 2016 Sep;12(3):2169-2174. doi: 10.3892/ol.2016.4860. Epub 2016 Jul 13
- 10- UBE2Q1 in a Human Breast Carcinoma Cell Line: Overexpression and Interaction with p53. **Shafiee SM**, Rasti M, Seghatoleslam A, Azimi T, Owji AA. Asian Pac J Cancer Prev. 16(9): 3723-7.
- 11- Expression Status of UBE2Q2 in Colorectal Primary Tumors and Cell Lines.

  Shafiee SM, Seghatoleslam A, Nikseresht M, Hosseini SV, Alizadeh-Naeeni M, Safaei A,
  Owji AA. Iran J Med Sci. 2014 Mar;39(2 Suppl):196-202.
- 12- UBE2Q1 expression in human colorectal tumors and cell lines. **Shafiee SM**, Seghatoleslam A, Nikseresht M, Hosseini SV, Alizadeh-Naeeni M, Safaei A, Owji AA. Mol Biol Rep. 2013 Dec;40(12):7045-51.
- 13- Expression of the novel human gene, UBE2Q1, in breast tumors. Seghatoleslam A, Nikseresht M, **Shafiee SM**, Monabati A, Namavari MM, Talei A, Safaei A, Owji AA. Mol Biol Rep. 2012 May;39(5):5135-41.
- 14- Effect of oral resveratrol on the BDNF gene expression in the hippocampus of the rat brain. Rahvar M, Nikseresht M, **Shafiee SM**, Naghibalhossaini F, Rasti M, Panjehshahin MR, Owji AA. Neurochem Res. 2011 May;36(5):761-5.
- 15- Endothelial nitric oxide synthase gene Glu298Asp polymorphism in patients with coronary artery disease. Salimi S, Firoozrai M, Zand H, Nakhaee A, **Shafiee SM**, Tavilani H, Mohebbi A. Ann Saudi Med. 2010 Jan-Feb;30(1):33-7.
- 16- Angiotensin converting enzyme DD genotype not associated with increased risk of coronary artery disease in the Iranian population. **Shafiee SM**, Firoozrai M, Salimi S, Zand H, Hesabi B, Mohebbi A. Pathophysiology. 2010 Jun;17(3):163-7.

- 17- Docosahexaenoic acid sensitizes Ramos cells to Gamma-irradiation-induced apoptosis through involvement of PPAR-gamma activation and NF-kappaB suppression. Zand H, Rahimipour A, Salimi S, **Shafiee SM**. Mol Cell Biochem. 2008 Oct;317(1-2):113-20.
- 18- Lack of evidence for contribution of intron4a/b polymorphism of endothelial nitric oxide synthase (NOS3) gene to plasma nitric oxide levels. Salimi S, Firoozrai M, Nourmohammadi I, Shabani M, **Shafiee SM**, Mohebbi A, Tavilani H. Acta Cardiol. 2008 Apr;63(2):229-34.
- 19- Involvement of PPAR-gamma and p53 in DHA-induced apoptosis in Reh cells. Zand H, Rhimipour A, Bakhshayesh M, **Shafiee M**, Nour Mohammadi I, Salimi S. Mol Cell Biochem. 2007 Oct;304(1-2):71-7.
- 20- Garlic extract reduces serum angiotensin converting enzyme (ACE) activity in nondiabetic and streptozotocin-diabetic rats. Hosseini M, **Shafiee SM**, Baluchnejadmojarad T. Pathophysiology. 2007 Oct;14(2):109-12.
- 21- Extraction and Development of Multi-Step Purification of Angiotensin-I Converting Enzyme (ACE) from Rabbit Lung. **Shafiee SM**, Keyhani M, Shabani M, Koochaki Shalmani I, Kaviani M. Razi Journal of Medical Sciences (RJMS). 2005; 11 (44): 979-985.

# Abstract presentations in congresses:

- 1- The beneficial role of metformin in epithelial-mesenchymal transition (EMT) of breast cancer cells. 12th International Congress Laboratory and Clinical Sciences. 12 14 December 2019, *Tehran, Iran.*
- 2- The new human gene, UBE2Q1, overexpression affects CEA level in colorectal cancer cell lines. The 15th Iranian National Congress of Biochemistry & 6th International Congress of Biochemistry and Molecular Biology. 25 28 Augost 2018, Isfahan, Iran.
- **3-** The novel human gene, UBE2Q1, affects p53 expression via MDM2 in colorectal cancer cell lines. The 22nd IFCC-EFLM European Congress of Clinical Chemistry and Laboratory Medicine , EuroMedLab. 11-15 June 2017, Athens, Greece.

- **4-** p53 repression after overexpression of the human novel gene, UBE2Q1, in MDAMB-468 breast cancer cell line. **The 13th Iranian Congress of Biochemistry and the 5th International Congress of Biochemistry and Molecular Biology, 16-19 April 2013.** *Yazd, Iran.*
- 5- The novel human gene, UBE2Q2, is expressed in colorectal cancer cell lines and overexpressed in primary colorectal tumors. The 13th Iranian Congress of Biochemistry and the5rd International Congress of Biochemistry and Molecular Biology, 16-19 April 2013. *Yazd, Iran.*
- 6- The human novel gene, UBE2Q1, is expressed in human colorectal cancer cell lines and overexpressed in colorectal cancer tissue. The 12th Iranian Congress of Biochemistry and the 4rd International Congress of Biochemistry and Molecular Biology, 6-9 September 2011. *Mashhad, Iran*.
- 7- The relevance of angiotensin converting enzyme insertion/deletion gene polymorphism and endothelial nitric oxide synthase Glu298Asp gene polymorphism for susceptibility to coronary artery disease in Iranian population. The 10th Iranian Congress of Biochemistry and the 3rd International Congress of Biochemistry and Molecular Biology, 16-19 November 2009. *Tehran, Iran*.
- 8- Insertion/deletion (ID) gene polymorphism of angiotensin converting enzyme in patients with coronary artery disease and in healthy subjects from Iran. The 9th Iranian congress of biochemistry and the 2nd international congress of biochemistry and molecular biology, 2007, *Shiraz, Iran.*

9- بررسی ارتباطبین پلی مرفیسم ژن p53 درکدون 72و استعداد ابتلابه سرطان در انسان -مطالعه . متا آنالیز از 1987 تا 2005 . هشتمین کنگره بیوشیمی ایران - در انشگاه تربیت مدرس -1384 - تهران، ایران.

10-بررسی عصاره سیربرمیزان فعالیت آنزیم مبدل آنژیوتانسین در سرم موشهای صحرایی دیابتی شده با استرپتوزوتوسین -شانزدهمین کنگره فارماکولوژی و فیزیولوژی ایران-د انشگاه تربیت مدرس-1382- تهران، ایران.

11- استخراج و بهینه سازی تخلیص چند مرحله ای آنزیم مبدل آنژیوتانسین از ریه خرگوشبه روشFPLC

هفتمین کنگره بیوشیمی ایران-دانشگاه علوم پزشکی اهواز -1382. امواز-ایران.

**12**-The relationship between human cancer susceptibility and p53 polymorphism at codon 72, **IFCC-FESCC-Euromedlab,2003**, *Barcelona*, *Spain*.

## Fellowships attendance:

- 1- One-month medical education fellowship program in February and March 2014, EDC, SUMS
- 2- Research fellowship level one; autumn 2014. SUMS
- 3- Research fellowship level Two; spring 2015. SUMS
- 4- Electronic learning fellowship; Center of Excellence for Electronic Learning in Medical Sciences; June July 2014. SUMS

### Skills:

## **Molecular biology**

DNA and RNA isolation, PCR and RT-PCR methods including Real-Time PCR, Gel Electrophoresis, Transformation, Transfection, SDS-PAGE, Immunobluting.

#### **General Cell Culture**

Worked with several colorectal cell lines and be familiar with procedures in generating of stable cell lines expressing the gene of interest.

#### **Biochemistry**

Protein Purification techniques including Column Chromatography, Spectrophotometry (UV/Visible), ELISA and general biochemistry techniques.

## مسئولیت ها:

- 1- معاون فرهنگی و امور دانشجوئی دانشکده پزشکی شیراز از اردیبهشت 1397 تاکنون.
- 2 عضو دائم شورای فرهنگی اساتید جوان دانشگاه علوم پزشکی شیراز از 1392 تا کنون.
- 3- نماینده تحصیلات تکمیلی گروه بیوشیمی در شورای تحصیلات تکمیلی دانشگاه از اردیبهشت ماه 1393 تا شهریور 1397.
  - 4- عضو هیئت علمی شورای نظارت بر انجمن های علمی دانشجویی
  - 5- مسئول اجرایی چهارمین، پنجمین، ششمین و هفتمین دوره مدرسه تابستانی تحصیلات تکمیلی دانشگاه علوم پزشکی شیراز در تابستانهای 1394-1397.

### References:

Will be provided upon request.

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