**Curriculum Vitae**

**Faranak Fallahian (PhD)**

**Department of Biochemistry & Genetic**

**School of Medicine, Qom University of Medical sciences**

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**Education:**

* Ph.D in Clinical Biochemistry (2006-2011) , Tarbiat Modares University, Tehran, Iran

Score: 18.2 of 20

* M.Sc. in Biochemistry (2002-2005) , Azzahra University, Tehran, Iran

Score: 19 of 20

* B.Sc. in Biology (1997-2001), Tehran University, Iran

Score: ~17 of 20

**Thesis:**

**1-The thesis to fulfill the M.Sc. degree entitled:**

**Cloning of the streptokinase mutant gene**

Supervisor: Prof. Bahram Kazemi, Dr. Ashraf Shabani,

**2- The thesis of Ph. D. entitled:**

**The effect of cGMP/PKG pathway on the growth of MCF-7 and MDA-MB468 breast cancer cells**

***Description***: Activation of protein kinase G (PKG) by cyclic GMP has becomeof considerable interest as a novel molecular approach forthe induction of apoptosis in cancer cells. In our studies, the inhibitory effect of cGMP/PKG pathway on the growth of human breast cancer cells has been shown. Furthermore, we obtained evidences that PKGIβ plays a direct role in the growth inhibition of breast cancer cells. In addition, these findings lead to the hypothesis that PKG expression might be down-regulated in human breast cancer. Therefore, we designed studies to evaluate the expression level of PKG isoforms by quantitative real-time RT-PCR in the malignant and benign tumors of the breast and corresponding normal tissues. Reduction in the expression level of PKG isoforms was observed in malignant and benign tumors compared to normal tissues.

**Supervisor:** Prof. Fatemeh Karami-Tehrani

**Advisor:** Dr. Siamak Salami

**The Experimental skills:**

* **Molecular and cellular biology techniques such as:**

DNA cloning

Real time PCR

RT-PCR

Western blotting

Mammalian cell culture

Cell signaling

Cytotoxicity assay methods

Detection of apoptosis by different methods

Flow cytometry.

**Published Articles:**

1- [Hamzeloo-Moghadam M](http://www.ncbi.nlm.nih.gov/pubmed?term=Hamzeloo-Moghadam%20M%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Aghaei M](http://www.ncbi.nlm.nih.gov/pubmed?term=Aghaei%20M%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [***Fallahian F***](http://www.ncbi.nlm.nih.gov/pubmed?term=Fallahian%20F%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Jafari SM](http://www.ncbi.nlm.nih.gov/pubmed?term=Jafari%20SM%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Dolati M](http://www.ncbi.nlm.nih.gov/pubmed?term=Dolati%20M%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Abdolmohammadi MH](http://www.ncbi.nlm.nih.gov/pubmed?term=Abdolmohammadi%20MH%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Hajiahmadi S](http://www.ncbi.nlm.nih.gov/pubmed?term=Hajiahmadi%20S%5BAuthor%5D&cauthor=true&cauthor_uid=25342596), [Esmaeili S](http://www.ncbi.nlm.nih.gov/pubmed?term=Esmaeili%20S%5BAuthor%5D&cauthor=true&cauthor_uid=25342596). Britannin, a sesquiterpene lactone, inhibits proliferation and induces apoptosis through the mitochondrial signaling pathway in human breast cancer cells. [Tumour Biol](http://www.ncbi.nlm.nih.gov/pubmed/25342596) 2015; 36:1191–1198**.**

2**-** Zarei SM, Ayatollahi AM, Ghanadian M, Kobarfard F, Aghaei M, Choudhary MI, ***Fallahian F***. [Unusual ingenoids from Euphorbia erythradenia Bioss with pro-apoptotic effects.](http://www.ncbi.nlm.nih.gov/pubmed/23994233) Fitoterapia 2013; 91: 87–94.

3-***Faranak Fallahian***, Fatemeh Karami-Tehrani and Siamak Salami. Induction of apoptosis by type Iβ protein kinase G in the human breast cancer cell lines MCF-7 and MDA-MB-468. Cell Biochemistry and Function 2012; 30: 183–190.

4-Mahmoud Aghaei, Fatemeh Karami-Tehrani, Mojtaba Panjehpour, Siamak Salami, and ***Faranak Fallahian***. Adenosine induces cell-cycle arrest and apoptosis in androgen-dependent and –independent prostate cancer cell lines, LNcap-FGC-10, DU-145, and PC3. The Prostate 2012; 72:361-375.

5-Fatemeh Karami-Tehrani, ***Faranak Fallahian*** and Morteza Atri.Expression of cGMP-dependent protein kinase, PKGIα, PKGIβ and PKGII in malignant and benign breast tumors. Tumor Biology 2012; 33 (6):1927-1932.

6-***Faranak Fallahian***, Fatemeh Karami-Tehrani, Siamak Salami and Mahmoud Aghaei. Cyclic GMP induced apoptosis via protein kinase G in oestrogen receptor-positive and -negative breast cancer cell lines. FEBS J 2011; 278:3360-90.

7-S.Noori, Z.M. Hassan, B. Rezaei, A. Rustaiyan, Z. Habibi, ***F. Fallahian***. Artemisinin can inhibit the calmodulin-mediated activation of phosphodiesterase in comparison with Cyclosporin A. International Immunopharmacology 2008; 8: 1744–1747.

8-B.Kazemi. ***F.Fallahian***, N.Seyyed, M.Bandepour, A.Shabani.Molecular cloning of the streptokinase mutant gene. Pakistan J of Biological Scieneces 2006; 9:557-559.

**Congress:**

1. Fallahian F, Karami-Tehrani. Involvement of cGMP signaling pathway in the regulation of cell viability in the breast cancer cell lines, 21th European Students Conference,13-17 october,Berlin,Germany,2010.

2-Fallahian F, Kazemi B, Seyed N. Cloning of the streptokinase mutant gene.8th Iranian congress of Biochemistry and 1th International congress of Biochemistry & Molecular Biology,11-15 September,Tehran,Iran,2005.