

# "CURRICULUM VITAE"

**Surname:** Fattahi  
**First name:** Sadegh  
**Date of birth:** 25.07.1984  
**Place of birth:** Babol, Iran  
**Nationality:** Iranian  
**Gender:** Male  
**Marital status:** Married  
Cell Phone: +98-937-121-5540  
E-mail: [Fattahi\\_pgs@yahoo.com](mailto:Fattahi_pgs@yahoo.com)

## Education

University	Location	Major field	Year awarded
Ferdowsi University	Mashhad-Iran	B.Sc in Biology	2007
Sistan & Balouchestan University	Zahedan-Iran	M.Sc in Biochemistry	2010
Babol University of Medical Sciences	Babol- Iran	PhD	2021

## Honors and Achievements

- First top student in M.Sc (2009)

## MSc. Dissertation

- Investigation of serum proteome in patients with psoriasis

## Ph.D. Dissertation

- The investigation of genes associated to sonic Hedgehog signaling pathway and their regulatory microRNAs in tumoral and non- tumoral tissues of gastric cancer patients

## Work Activities

2010-2013 : Research assistant at Cellular & Molecular Biology Research Center,  
Babol University of Medical Sciences  
Since 2013: Collaboration with the Molecular diagnostic laboratory of North Branch of  
Pasteur Institute of Iran

## Laboratory Research Skills

- Cell culture (Tissue & Cell lines)
- Electrophoresis, 2DE
- Western blot
- Proteomics
- PCR & RT-PCR

- Real time PCR
- ELISA
- Primer design software (Allele ID6)
- Alignment software (CLC Main Workbench 5)
- Proteomics software (Melanie)
- Whole exome sequencing analysis

## Publications

Golpour M., Alimohammadi M., Sohbatzadeh F., **Fattahi S.**, Bekeschus S., and Rafiei A. (2022) Cold atmospheric pressure plasma treatment combined with starvation increases autophagy and apoptosis in melanoma in vitro and in vivo. *Experimental Dermatology*.

Eslami M., Rafiei A., Baghbanian S.M., **Fattahi S.**, Yazdani Z., Valadan R., and Kardan M. (2022) Serum levels and genetic variation of IL-35 are associated with multiple sclerosis: a population-based case-control study. *Immunologic Research* 70, 75-85.

Pourbagher R., Ghorbani H., Akhavan-Niaki H., Jorsaraei S.G.A., **Fattahi S.**, Ghooran S., Abedian Z., Ghasemi M., Saeedi F., Jafari N., Kalali B., and Mostafazadeh A. (2021) Downregulation of Stemness Genes and Induction of Necrosis in Rat LA7 Cancer Stem Cells Induced Tumors Treated with Starved Fibroblasts Culture Supernatant. *Rep Biochem Mol Biol* 10, 105-118.

**Sadegh Fattahi**, Novin Nikbakhsh, Hassan Taheri, Elham Ghadami, Mohammad Ranaee, Haleh Akhavan-Niaki. LINC02688 and PP7080 as novel biomarkers in early diagnosis of gastric cancer (2021). *Non-coding RNA Research journal* 6, 86-91.

**Sadegh Fattahi**, Novin Nikbakhsh, Mohammad Ranaei, Davood Sabour, Haleh Akhavan-Niaki. Association of sonic hedgehog signaling pathway genes IHH, BOC, RAB23a and MIR195-5p, MIR509-3-5p, MIR6738-3p with gastric cancer stage (2021). *Sci Rep* 11, 7471

**Sadegh Fattahi**, Novin Nikbakhsh, Hassan Taheri, Mohammad Ranaee, Haleh Akhavan-Niaki. RNA sequencing analysis revealed multiple activated pathways and novel long non-coding RNAs in early stage of gastric adenocarcinoma. *Reports of Biochemistry and Molecular Biology*, 2021. **9**(4): p. 478-489.

**Fattahi S.**, Amjadi-Moheb F, Tabaripour R, et al. (2020) PI3K/AKT/mTOR signaling in gastric cancer: Epigenetics and beyond. *Life Sci*. 262;118513.

Mohsen Asouri, Mohammad Ali Sahraian, Morteza Karimpoor, **Sadegh Fattahi**, Nima

Motamed, Rozita Doosti, Galia Amirbozorgi, Shokufeh Sadaghiani, Fereidoun Mahboudi, Haleh Akhavan Niaki. (2020) Molecular Detection of Epstein–Barr Virus, Human Herpes Virus 6, Cytomegalovirus, and Hepatitis B Virus in Patients with Multiple Sclerosis. Middle East Journal of Digestive Diseases (MEJDD) 12;171-177.

Talebian H, Monfared AS, Niaki HA, **Fattahi S**, Bakhtiari E, Changizi V (2020) Investigating the expression level of NF-KB and HIF1A genes among the inhabitants of two different background radiation areas in Ramsar, Iran. Journal of Environmental Radioactivity 220-221:106292.

Pourbagher R, Akhavan-Niaki H, Jorsaraei SGA, **Fattahi S**, Sabour D, Zabihi E, Abedian Z, et al (2020) Targeting LA7 breast cancer stem cells of rat through repressing the genes of stemness-related transcription factors using three different biological fluids. Gene 734:144381.

Salehi MS, Pandamooz S, Safari A, Jurek B, Tamadon A, Namavar MR, Dianatpour M, et al (2020) Epidermal neural crest stem cell transplantation as a promising therapeutic strategy for ischemic stroke. CNS Neurosci Ther 26:670-681.

Mohsen Asouri, Hamid Alinejad Rokni, Mohammad Ali Sahraian, **Sadegh Fattahi** et al. (2020) Analysis of Single Nucleotide Polymorphisms in HLA-DRA, IL2RA, and HMGB1 Genes in Multiple Sclerosis, Reports of Biochemistry and Molecular Biology 9; 199-208.

**Fattahi S**, Kosari-Monfared M, Golpour M, Emami Z, Ghasemiyani M, Nouri M, Akhavan-Niaki H (2020) LncRNAs as potential diagnostic and prognostic biomarkers in gastric cancer: A novel approach to personalized medicine. J Cell Physiol 235:3189-3206.

Kardan M, Rafiei A, Golpour M, Ebrahimzadeh MA, Akhavan-Niaki H, **Fattahi S** (2020) Urtica dioica Extract Inhibits Cell Proliferation and Induces Apoptosis in HepG2 and HTC116 as Gastrointestinal Cancer Cell Lines. Anticancer Agents Med Chem.

Bakhtiari E, Monfared AS, Niaki HA, Borzoueisileh S, Niksirat F, **Fattahi S**, Monfared MK, et al (2019) The expression of MLH1 and MSH2 genes among inhabitants of high background radiation area of Ramsar, Iran. J Environ Radioact 208-209:106012.

Samadani AA, Nikbakhsh N, Taheri H, Shafaei S, **Fattahi S**, Pilehchian Langroudi M, Hajian K, et al (2019) CDX1/2 and KLF5 Expression and Epigenetic Modulation of Sonic Hedgehog Signaling in Gastric Adenocarcinoma. Pathol Oncol Res 25:1215-1222.

Kosari-Monfared M, Nikbakhsh N, Fattahi S, Ghadami E, Ranaei M, Taheri H, Amjadi-Moheb F, et al (2019) CTNNBIP1 downregulation is associated with tumor grade and viral infections in gastric adenocarcinoma. J Cell Physiol 234:2895-2904.

Kiani S, Akhavan-Niaki H, **Fattahi S**, Kavosian S, Babaian Jelodar N, Bagheri N, Najafi Zarrini H (2018) Purified sulforaphane from broccoli (*Brassica oleracea* var. *italica*) leads to

alterations of CDX1 and CDX2 expression and changes in miR-9 and miR-326 levels in human gastric cancer cells. *Gene* 678:115-123.

Rahmani M, Mohammadnia-Afrouzi M, Nouri HR, **Fattahi S**, Akhavan-Niaki H, Mostafazadeh A (2018) Human PBMCs fight or flight response to starvation stress: Increased T-reg, FOXP3, and TGF- $\beta$ 1 with decreased miR-21 and Constant miR-181c levels. *Biomed Pharmacother* 108:1404-1411.

**Fattahi S**, Kosari-Monfared M, Ghadami E, Golpour M, Khodadadi P, Ghasemiyan M, Akhavan-Niaki H (2018) Infection-associated epigenetic alterations in gastric cancer: New insight in cancer therapy. *J Cell Physiol* 233:9261-9270.

**Fattahi S**, Golpour M, Amjadi-Moheb F, Sharifi-Pasandi M, Khodadadi P, Pilehchian-Langroudi M, Ashrafi GH, et al (2018) DNA methyltransferases and gastric cancer: insight into targeted therapy. *Epigenomics* 10:1477-1497.

**Fattahi S**, Karimi Alivije M, Babamahmoodi F, Bayani M, Sadeghi Haddad Zavareh M, Asouri M, Lotfi M, et al (2018) Cytochrome P450 Genes (CYP2E1 and CYP1A1) Variants and Susceptibility to Chronic Hepatitis B Virus Infection. *Indian J Clin Biochem* 33:467-472.

**Fattahi S**, Nikbakhsh N, Taheri H, Ghadami E, Kosari-Monfared M, Amirbozorgi G, Asouri M, et al (2018) Prevalence of multiple infections and the risk of gastric adenocarcinoma development at earlier age. *Diagn Microbiol Infect Dis* 92:62-68.

Ghadami E, Nikbakhsh N, **Fattahi S**, Kosari-Monfared M, Ranaee M, Taheri H, Amjadi-Moheb F, et al (2019) Epigenetic alterations of CYLD promoter modulate its expression in gastric adenocarcinoma: A footprint of infections. *J Cell Physiol* 234:4115-4124.

**Fattahi S**, Pilehchian Langroudi M, Akhavan-Niaki H (2018) Hedgehog signaling pathway: Epigenetic regulation and role in disease and cancer development. *J Cell Physiol* 233:5726-5735.

**Fattahi S**, Amirbozorgi G, Lotfi M, Navaei B, Kavosian S, Asouri M, Akhavan H (2017) Development of a Universal Taqman Probe for mRNA Gene Expression Analysis. *Iranian Journal of Science and Technology, Transactions A: Science* 42.

Goodarzi G, Qujeq D, Elmi MM, Feizi F, **Fattahi S**, Mosavi N (2018) Two-Dimensional Gel Electrophoresis of Coelomic Fluid of *Eisenia foetida* Earthworm. *International Biological and Biomedical Journal* 4:112-116.

**Fattahi S**, Ghadami E, Asouri M, Motevalizadeh Ardekanid A, Akhavan-Niaki H (2018) *Urtica dioica* inhibits cell growth and induces apoptosis by targeting Ornithine decarboxylase and Adenosine deaminase as key regulatory enzymes in adenosine and polyamines homeostasis in human breast cancer cell lines. *Cell Mol Biol (Noisy-le-grand)*

64:97-102.

Amoli RI, Nowroozi J, Sabokbar A, **Fattahi S**, Amirbozorgi G (2017) Isolation of *Stenotrophomonas maltophilia* from water and water tap. *Biomedical Research (India)* 28:8660-8664.

Abedian Z, **Fattahi S**, Pourbagher R, Edrisi S, Mostafazadeh A (2017) Sustained small and intermediate size proteins expression in phorbol 12-myristate 13-acetate/ionomycin prolonged stimulated human fibroblasts. *Asian Pacific Journal of Tropical Biomedicine* 7:432-436.

**Fattahi S**, Pilehchian Langroudi M, Samadani AA, Nikbakhsh N, Asouri M, Akhavan-Niaki H (2017) Application of unique sequence index (USI) barcode to gene expression profiling in gastric adenocarcinoma. *J Cell Commun Signal* 11:97-104.

Pilehchian Langroudi M, Nikbakhsh N, Samadani AA, **Fattahi S**, Taheri H, Shafaei S, Amirbozorgi G, et al (2017) FAT4 hypermethylation and grade dependent downregulation in gastric adenocarcinoma. *J Cell Commun Signal* 11:69-75.

**Fattahi S**, Karimi Alivije M, Babamahmoodi F, Bayani M, Sadeghi-Haddad-Zavareh M, Asouri M, Lotfi M, et al (2017) Impact of Genetic Variants in Mir-122 Gene and its Flanking Regions on Hepatitis B Risk. *International Biological and Biomedical Journal* 3:1-7.

Samadani AA, Nikbakhsh N, Pilehchian M, **Fattahi S**, Akhavan-Niaki H (2016) Epigenetic changes of CDX2 in gastric adenocarcinoma. *J Cell Commun Signal* 10:267-272.

**Fattahi S**, Golpour M, Akhavan Niaki H (2016) *Urtica Dioica*, An Emerald in the Medical Kingdom. *International Biological and Biomedical Journal* 2:1-10.

Goodarzi G, Qujeq D, Elmi MM, Feizi F, **Fathai S** (2016) The effect of the glycolipoprotein extract (G-90) from earthworm *Eisenia foetida* on the wound healing process in alloxan-induced diabetic rats. *Cell Biochem Funct* 34:242-249.

Norollahi S, Alipour M, Nikbakhsh N, Taheri H, Hamidian M, **Fattahi S** (2016) The role of MicroRNAs in cancer progression. *J Clin Exp Oncol* 5.

Amini Navaie B, Kavosian S, **Fattahi S**, Hajian-Tilaki K, Asouri M, Bishekolaie R, Akhavan-Niaki H (2015) Antioxidant and Cytotoxic Effect of Aqueous and Hydroalcoholic Extracts of the *Achillea Millefolium L.* on MCF-7 Breast Cancer Cell Line. *International Biological and Biomedical Journal* 1:119-125.

**Fattahi S**, Yousefi GA, Amirbozorgi G, Lotfi M, Naeiji A, Asouri M, Kavosian S, et al (2015) Lack of Association of CYP2E1 and CYP1A1 Polymorphisms With Osteoporosis in Postmenopausal Women. *International Biological and Biomedical Journal* 1:72-80.

Samadani AA, Nikbakhsh N, **Fattahi S**, Pourbagher R, Aghajanpour Mir SM, Mousavi Kani

N, Abedian Z, et al (2015) RNA Extraction from Animal and Human's Cancerous Tissues: Does Tissue Matter? International journal of molecular and cellular medicine 4:54-59.

**Fattahi S**, Kazemipour N, Hashemi M, Sepehrimanesh M (2014) Alpha-1 antitrypsin, retinol binding protein and keratin 10 alterations in patients with psoriasis vulgaris, a proteomic approach. Iranian journal of basic medical sciences 17:651-655.

**Fattahi S**, Zabihi E, Abedian Z, Pourbagher R, Motevalizadeh Ardekani A, Mostafazadeh A, Akhavan-Niaki H (2014) Total Phenolic and Flavonoid Contents of Aqueous Extract of Stinging Nettle and In Vitro Antiproliferative Effect on Hela and BT-474 Cell Lines. International journal of molecular and cellular medicine 3:102-107.

**Fattahi S**, Ardekani A, Zabihi E, Abedian Z, Mostafazadeh A, Pourbagher R, Akhavan H (2013) Antioxidant and Apoptotic Effects of an Aqueous Extract of Urtica dioica on the MCF-7 Human Breast Cancer Cell Line. Asian Pacific journal of cancer prevention : APJCP 14:5317-5323.

**Fattahi S**, Kazemipour N, Valizadeh J, Hashemi M, Ghazizade H (2012) Comparison of Different Albumin Removal Methods for Evaluation of Human Serum Proteome. Zahedan Journal of Research in Medical Sciences 14.

## Communications

1) Kazemipour Nasrin, **Fattahi Sadegh**, Sample preparation prior to two-dimensional gel electrophoresis, Congress biology and the modern world, Agricultural Sciences & Natural Resources University of Gorgan, Iran. 16-17 October 2008

2) Kazemipour, Nasrin: Hashemi, Mohamad: Daliri, Mina: **Fattahi Sadegh**. Study of the human serum proteome of psoriasis disease: a preliminary report, 10<sup>th</sup> Iranian congress of biochemistry & 3<sup>rd</sup> international congress of biochemistry and molecular biology, Tehran, Iran 16-19 November 2009

3) Kazemipour, Nasrin: Hashemi, Mohamad: Daliri, Mina: **Fattahi Sadegh**. Sample preparation of human serum for the analysis of psoriasis biomarkers, The 3<sup>rd</sup> Iranian proteomics congress. Pasteur institute of Iran, 26-27 May 2010

4) Kazemipour, Nasrin: Ghazizade H: Salimi saeideh: **Fattahi Sadegh**. A preliminary report of the serum proteome of patients with systemic lupus erythematosus and healthy individuals. 11<sup>th</sup> Congress of Biochemistry, University of Medical Sciences Qazvin, 8-10 February 2011

5) Monireh Golpour, **Sadegh Fattahi**, Hamidreza Khorasani, Haleh Akhavan Niaki, Hamidreza Varziri, Amrollah Mostafazadeh. Human dermal fibroblast secretes some proteins inducing higher proliferation rate in a paracrine manner in compensation to serum starvation. Congress of Technology and research, The University of Guilan, 9-12 December 2012

## Name and address of referees

1. Dr. Haleh Akhavan-Niaki, Director of Genetic laboratory of Amirkola children hospital, Babol University of Medical Sciences, Babol, Iran.

Tel/Fax: 0111-2196476

E-mail: [halehakhavan@yahoo.com](mailto:halehakhavan@yahoo.com)

2. Dr. Nasrin Kazemipour, Department of Basic Sciences, Shiraz University of Veterinary Medicine, Shiraz, Iran.

E-mail: [kazemipour@shirazu.ac.ir](mailto:kazemipour@shirazu.ac.ir)

3. Dr. Amrolah Mostafazadeh, Department of Immunology and Microbiology, Babol University of Medical Sciences, Babol, Iran.

Tel: +981112199591-5, Ext. 399, Fax: +981112197667.

E-mail: [amrolah65@yahoo.com](mailto:amrolah65@yahoo.com)

4. Dr. Maryam Mitra Elmi, Faculty of Para-Medicine, Babol University of Medical Sciences, Babol, Iran.

E-mail: [mitra\\_elmi2002@yahoo.com](mailto:mitra_elmi2002@yahoo.com)