

# Parvaneh Nikpour, PhD

## Associate Professor



### Curriculum vitae

Last updated: Oct. 2022

### Personal Information

**Name:** Parvaneh

**Surname:** Nikpour

**Date of Birth:** Jan. 7, 1979

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### **Google Scholar profile:**

<https://scholar.google.com/citations?user=JusGxKgAAAAJ&hl=en>

### **LinkedIn profile:**

[www.linkedin.com/in/parvaneh-nikpour-81234589](http://www.linkedin.com/in/parvaneh-nikpour-81234589)

### Current position

2017-present, Associate Professor, Isfahan University of Medical Sciences, Isfahan, Iran

2010-2017, Assistant Professor, Isfahan University of Medical Sciences, Isfahan, Iran

### Academic degrees and Internship periods

2018 (July-October), Guest researcher in the Department of Systems Biology and Bioinformatics (SBI), Prof. Olaf Wolkenhauer, Rostock, Germany

2012 (March-April), Guest researcher in the Genetics Department of Florence University, Research lab of Prof. Maurizio Genuardi, Florence, Italy

2011 (July-Sep), Guest researcher in the IOR Institute of Oncology Research, Research lab of Prof. Giuseppina Carbone, Bellinzona, Switzerland

2007-2008, Ph.D. Internship period at the Urology research lab of Prof. WA Schulz, School of Medicine, Heinrich-Heine University, Duesseldorf, Germany

2003-2010, Ph.D. of Molecular Genetics, School of Basic Sciences, Tarbiat Modarres University, Tehran, Iran

2000-2003, MSc of Genetics, School of Basic Sciences, Tarbiat Modarres University, Tehran, Iran

1996-2000, B.Sc. of Cell and Molecular Biology, School of Basic Sciences, Shiraz University, Shiraz, Iran

## **(My) Ph.D. and M.Sc. theses:**

**Ph.D. Dissertation:** Studying stem cell self-renewal genes in bladder cancer and evaluation of interfering in their expression using RNAi technique

Supervisors: Prof. S.J. Mowla and Prof. W.A. Schulz (Grade 19.65/20)

**M.Sc. Thesis:** Evaluation of CatSper gene expression in biopsies taken from testis and its relation to infertility (Grade 20/20)

Supervisor: Prof. S.J. Mowla

## **Research techniques**

**Bioinformatics and Systems Biology:** Primer designing, siRNA designing, RNA-seq data analysis (TCGA), Methylome data analysis (TCGA), Integrative analysis of transcriptome and epigenome data (TCGA), Network analysis, Survival analysis, Functional enrichment analyses, Weighted Gene Co-Expression Network Analysis (WGCNA), Working with Cytoscape and its plugins, Working with R and its packages, Basic knowledge of Python and machine learning methods, Conducting a systematic review search, quality assessment and meta-analysis

**Molecular Biology:** DNA and RNA extraction, PCR & qRT-PCR, Gene Cloning, Gene over-expression & RNA interference, Genotyping techniques (RFLP, ARMS, Tetra-primer ARMS, TaqMan, Sanger sequencing), High resolution melt analysis (HRM analysis), Microarray

**Cell Biology:** Culturing of primary cells and cell lines, Colony forming assay, Flow cytometry, Confocal microscope, Protein isolation and quantification (BCA) & Western blotting, Immunohistochemistry and Immunofluorescence methods, Cell Proliferation assays, Apoptosis assays, Cell cycle analysis, Cell migration and invasion assays, Cell senescence assay

**Animal techniques:** Mice handling, Breeding, Behavioural tests, Producing a mouse model of autism

## **Computer Skills**

Word, PowerPoint, Excel, Endnote, Photoshop, Prism, SPSS

## **Languages**

English: Professional working proficiency

Persian: Native

German: Elementary proficiency

## **Work experiences**

2017-present, Associate Professor (Teaching and Research), Isfahan University of Medical Sciences, Isfahan, Iran

2010-2017, Assistant Professor (Teaching and Research), Isfahan University of Medical Sciences, Isfahan, Iran

## **Selected executive activities**

2010-present, Member of MSc and PhD Thesis Defence Committee of Faculty of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran

2021-present, Member of Research Committee of Genetics and Stem Cells, National Institute for Medical Research Development (NIMAD), Ministry of Health and Medical Education, Tehran, Iran

2018-2021, Member of Research Ethics Committee of Faculty of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran

2017-2019, Member of Research Council, Deputy of Education and Graduate Studies, Faculty of Medicine, Isfahan University of Medical Sciences, Isfahan, Iran

2011-2014, Member of Research Council, Vice Chancellor for Research and Technology, Isfahan University of Medical Sciences, Isfahan, Iran

### **Current thesis under my supervision**

Two master student theses as supervisor (expected time of defence: Feb 2023)

One PhD student as supervisor (expected time of defence: Dec 2022)

Three PhD students as co-supervisor (expected time of defence: Feb 2023)

### **Defended thesis under my supervision**

Fifteen master student theses

Two PhD students

### **Selected Awards and Honours**

2005-current, Honored as a member of Iran's National Elites Foundation, Tehran, Iran

2005, Honored as the distinguished student in the Razi Festival of Medical Sciences, Iran

2004, The Iranian winner of the 5<sup>th</sup> Royan International Research Award, Tehran, Iran

2003, Honored as the distinguished researcher in Tarbiat Modares University and Shahid Beheshti University of Medical Sciences, Tehran, Iran

### **Selected Publications**

(last updated Oct 2022, \* corresponding author)

Complete list of publications can be reached via:

<https://scholar.google.com/citations?user=JusGxKgAAAAJ&hl=en>

1. Nadeali Z, Mohammad-Rezaei F, Aria H, **Nikpour P\***, Possible role of pannexin 1 channels and purinergic receptors in the pathogenesis and mechanism of action of SARS-CoV-2 and therapeutic potential of targeting them in COVID-19. *Life Sci.* 2022 May 15;297:120482
2. Donyavi MH, Salehi-Mazandarani S, **Nikpour P\***, Comprehensive competitive endogenous RNA network analysis reveals EZH2-related axes and prognostic biomarkers in hepatocellular carcinoma. *Iran J Basic Med Sci.* 2022 Mar;25(3):286-294
3. Ansari S, **Nikpour P\***, Identification of Cancer/Testis Antigens Related to Gastric Cancer Prognosis Based on Co-Expression Network Analysis and Integrated Transcriptome Analysis, Accepted for publication in: *Advanced Biomedical Research*, June 2022
4. Iranmanesh P, Vedaei A, Salehi-Mazandarani S, **Nikpour P**, Khazaei S, Khademi A, Galler KM, Nekoofar MH, Dummer PMH, MicroRNAs-Mediated Regulation of the Differentiation of Dental Pulp-Derived Mesenchymal Stem Cells: A Systematic Review and Bioinformatic Analysis, Revised in: *The Stem Cell Research & Therapy*, Oct 2022
5. Hosseini M, Lotfi-Shahreza M, **Nikpour P\***, Integrative analysis of DNA methylation and gene expression through machine learning identifies diagnostic and prognostic biomarkers for stomach cancer, Submitted to: *Journal of Cellular and Molecular Medicine*, Oct 2022
6. Khalafiyani A, Emadi-Baygi M, Wolfien M, Salehzadeh-Yazdi A, **Nikpour P\***, Construction of a three-component regulatory network of transcribed ultraconserved regions for the identification of prognostic biomarkers in gastric cancer, Submitted to: *Journal of Cellular Physiology*, Oct 2022

7. Bahrami B, Wolfien M, **Nikpour P\***, An integrated analysis of whole transcriptome and epigenome data reveals ENSR00000272060, an enhancer RNA, as a potential diagnostic biomarker in gastric cancer, Submitted to: *Scientific Reports*, June 2022
8. Ansari S, **Nikpour P\***, *LNCAROD* promotes the proliferation and migration of gastric cancer: a bioinformatics analysis and experimental validation, Submitted to: *Nucleosides, Nucleotides & Nucleic Acids*, Oct 2022
9. Salehi-Mazandarani S, **Nikpour P\***, Integrated analysis of a four-component competing endogenous RNA network reveals potential diagnostic and prognostic biomarkers in gastric cancer, Submitted to: *Cancer Medicine*, Aug 2022
10. Azizi M, Salehi-Mazandarani S, **Nikpour P**, Andalib A, Rezaei M, Role of endoplasmic reticulum stress-inducing miRNAs in immunogenic cell death: A literature review and bioinformatics analysis, Submitted to: *Cancer Treatment Reviews*, Aug 2022
11. Ganji M, Mohammadtaheri F, Mirmohammadsadeghi N, Emadi-Baygi M, Malek M, **Nikpour P\***, Inference and validation of an integrated regulatory network of autism, *BioRxiv Preprint*, 10 Jun 2020, doi: 10.1101/2020.06.08.139733, Submitted to: *Journal of Cellular Physiology*, July 2022
12. Norouzi M, Miar P, Norouzi S, **Nikpour P\***, Nervous System Involvement in COVID-19: a Review of the Current Knowledge. *Mol Neurobiol*. 2021 Jul;58(7):3561-3574.
13. Rahimi A, Sedighi R, Emadi-Baygi M, Honardoost MA, Mowla SJ, Khanahmad H, **Nikpour P\***. Bioinformatics prediction and experimental validation of a novel microRNA: hsa-miR-B43 within human *CDH4* gene with a potential metastasis-related function in breast cancer. *J Cell Biochem*. 2020 Feb;121(2):1307-1316
14. Khalaj Z, Baratieh Z, **Nikpour P**, Schwab M, Schaeffeler E, Mokarian F, Khanahmad H, Salehi R, Mürdter TE, Salehi M. Clinical Trial: CYP2D6-Related Dose Escalation of Tamoxifen in Breast Cancer Patients With Iranian Ethnic Background Resulted in Increased Concentrations of Tamoxifen and Its Metabolites. *Front Pharmacol*. 2019 May 24;10:530
15. Nourbakhsh N, Emadi-Baygi M, Salehi R, **Nikpour P\***. Gene Expression Analysis of Two Epithelial-mesenchymal Transition-related Genes: Long Noncoding RNA-ATB and SETD8 in Gastric Cancer Tissues. *Adv Biomed Res*. 2018 Mar 27;7:42
16. Tanhaei S, **Nikpour P\***, Ghaedi K, Rabiee F, Homayouni Moghadam F, Nasr-Esfahani MH. RNA/Protein Discordant Expression of Fndc5 in Central Nervous System Is Likely to Be Mediated Through microRNAs. *DNA Cell Biol*. 2018 Apr;37(4):373-380
17. Akbarian SA, Salehi-Abargouei A, Pourmasoumi M, Kelishadi R, **Nikpour P**, Heidari-Beni M. Association of Brain-derived neurotrophic factor gene polymorphisms with body mass index: A systematic review and meta-analysis. *Adv Med Sci*. 2018 Mar;63(1):43-56
18. Baratieh Z, Khalaj Z, Honardoost MA, Emadi-Baygi M, Khanahmad H, Salehi M, **Nikpour P\***. Aberrant expression of PlncRNA-1 and TUG1: potential biomarkers for gastric cancer diagnosis and clinically monitoring cancer progression. *Biomark Med*. 2017 Dec;11(12):1077-1090
19. Emadi-Baygi M, Sedighi R, Nourbakhsh N, **Nikpour P\***. Pseudogenes in gastric cancer pathogenesis: a review article. *Brief Funct Genomics*. 2017 Nov 1;16(6):348-360
20. Nasrollahzadeh-Khakiani M, Emadi-Baygi M, Schulz WA, **Nikpour P\***. Long noncoding RNAs in gastric cancer carcinogenesis and metastasis. *Brief Funct Genomics*. 2017 May 1;16(3):129-145

21. Rezaei M, Emadi-Baygi M, Hoffmann MJ, Schulz WA, **Nikpour P\***. Altered expression of LINC-ROR in cancer cell lines and tissues. *Tumour Biol.* 2016 Feb;37(2):1763-9
22. Mohammadi Z, Shariati L, Khanahmad H, Kolaahdouz M, Kianpoor F, Ghanbari JA, Hejazi Z, Salehi M, **Nikpour P**, Tabatabaiefar MA. A Lentiviral Vector Expressing Desired Gene Only in Transduced Cells: An Approach for Suicide Gene Therapy. *Mol Biotechnol.* 2015 Sep;57(9):793-800
23. Greife A, Jankowiak S, Steinbring J, **Nikpour P**, Niegisch G, Hoffmann MJ, Schulz WA. Canonical Notch signalling is inactive in urothelial carcinoma. *BMC Cancer.* 2014 Aug 29;14:628
24. Emadi-Andani E, **Nikpour P\***, Emadi-Baygi M, Bidmeshkipour A. Association of *HOTAIR* expression in gastric carcinoma with invasion and distant metastasis. *Adv Biomed Res.* 2014 May 28;3:135
25. Nikpour M, Emadi-Baygi M, Fischer U, Niegisch G, Schulz WA, **Nikpour P\***. MTDH/AEG-1 contributes to central features of the neoplastic phenotype in bladder cancer. *Urol Oncol.* 2014 Jul;32(5):670-7
26. **Nikpour P**, Emadi-Baygi M, Mohamad-Hashem F, Maracy MR, Haghjooy-Javanmard S. MSI1 overexpression in diffuse type of gastric cancer. *Pathol Res Pract.* 2013 Jan 15;209(1):10-3
27. **Nikpour P**, Baygi ME, Steinhoff C, Hader C, Luca AC, Mowla SJ, Schulz WA. The RNA binding protein Musashi1 regulates apoptosis, gene expression and stress granule formation in urothelial carcinoma cells. *J Cell Mol Med.* 2011 May;15(5):1210-24
28. **Nikpour P**, Mowla SJ, Jafarnejad SM, Fischer U, Schulz WA. Differential effects of Nucleostemin suppression on cell cycle arrest and apoptosis in the bladder cancer cell lines 5637 and SW1710. *Cell Prolif.* 2009 Dec;42(6):762-9
29. **Nikpour P**, Forouzandeh-Moghaddam M, Ziaee SA, Dokun OY, Schulz WA, Mowla SJ. Absence of PIWIL2 (HILI) expression in human bladder cancer cell lines and tissues. *Cancer Epidemiol.* 2009 Oct;33(3-4):271-5
30. **Nikpoor P**, Mowla SJ, Movahedin M, Ziaee SA, Tiraihi T. CatSper gene expression in postnatal development of mouse testis and in subfertile men with deficient sperm motility. *Hum Reprod.* 2004 Jan;19(1):124-8

## **Referees**

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